Examining the Effects of the Holistic Arts-Based Program on Teachers' Stress, Mindfulness and Teaching Practices

by

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A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts (MA) in Interdisciplinary Health

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Laurentian University
Sudbury, Ontario, Canada

THESIS DEFENCE COMMITTEE/COMITÉ DE SOUTENANCE DE THÈSE
Laurentian Université/Université Laurentienne
Faculty of Graduate Studies/Faculté des études supérieures

Title of Thesis Titre de la thèse	Examining the Effects of the Holistic Arts-Based Program on Teachers' Stress, Mindfulness and Teaching Practices
Name of Candidate Nom du candidat	Hardy, Amanda
Degree Diplôme	Master of Arts
Department/Program Département/Programme	Interdisciplinary Health
Date of Defence Date de la soutenance	June 26, 2019

APPROVED/APPROUVÉ

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ACCESSIBILITY CLAUSE AND PERMISSION TO USE

Abstract

The concept of teacher stress has received extensive study in the field of education. School boards, unions, and governments acknowledge the high prevalence of stress amongst teachers. Efforts to mitigate the negative effects associated with teacher stress on teacher well-being and student learning conditions have led to the development of a number of interventions including Mindfulness-Based Interventions (MBIs). MBIs offer participants training in developing non-judgmental present moment awareness, which has been shown to decrease stress, anxiety, and depression.

My research study examined the effects of a specific MBI, the Holistic Arts-Based Program (HAP) on teachers' reported stress levels, mindfulness skills, and their teaching practices. HAP is an arts-based 12-week MBI designed to make mindfulness concepts and skills more accessible through the use of arts-based methods. Previous studies found that participating in HAP has positive benefits that include improved attention, coping skills, self-awareness, and self-esteem.

Data was collected pre- and post-HAP. Teachers were interviewed and completed the Five Facet Mindfulness Questionnaire (FFMQ) and the Teacher Stress Inventory (TSI). Findings are promising regarding the feasibility, suitability, and benefits of HAP for teachers. The qualitative thematic analysis led to the development of the following themes: (1) more accurate and comprehensive understanding of mindfulness, (2) participants' experiences learning mindfulness through experiential arts-based group work, (3) personal and professional benefits of learning mindfulness, and (4) educational consequences of teachers learning mindfulness through arts-based methods. The TSI and FFMQ also suggested that teacher participation in

HAP contributed to decreased teacher stress and increased teachers' mindfulness, their presence, and capacity to offer mindfulness activities to students.

This study demonstrates how HAP could support teachers in increasing their own self-awareness and mindfulness practice, thereby mitigating some of the negative effects of stress. Participants in this study also demonstrated a keen interest in bringing mindfulness into their schools and classrooms. Future consideration may be given to offer arts-based mindfulness training to teachers in different formats such as full-day workshops or professional development sessions.

Keywords: mindfulness, arts-based, group work, teacher presence, teachers, education, stress, mindfulness-based interventions, holistic arts-based program.

Acknowledgements

Without a doubt I would not be here without the incredible support I have been blessed to receive leading to, and throughout this journey.

I would like to first acknowledge the powerful influence of my family on my educational, professional and personal journey. My mother, Dr. Sheila Cote-Meek for instilling within me a passion for creating change and her unwavering support of my graduate work and in everything I do; My father, Mario Hardy for always being there to lend an ear and encouraging me throughout my education; and my children, Kendra, Ryker and Haven who in their young ages understood why I couldn't make every hockey game or jiu jitsu practice. They are a continuous source of inspiration for exploring and learning about the world around us and making a difference in the lives with whom we share it.

I must express my sincere gratitude to my supervisor, Dr. Coholic for her insight and encouragement throughout this research project. Dr. Coholic consistently provided me with invaluable feedback and challenged my thinking, encouraging and supporting me in meeting my research and writing goals. Her immense knowledge in this subject area incented me to learn more and apply my knowledge in a way to help others. This research would not have been possible without her guidance, support and dedication.

Along with my advisor, I'd like to thank my two committee members, Dr. Diana Urajnik and Dr. Jeffrey Wood, for asking questions, adding their perspectives and strengthening my research and writing.

I am deeply honoured that my participants dedicated their time and energy to this research; without them, none of this would be possible. Thank you to my co-facilitators, Mariah

Dempster and Ken Lander, and all members of the HAP team. A big thank you to Tricia Grynspan and Steph McMahon for sharing your passion for change, social justice, and learning.

I'd like to thank my Churchill family. Churchill, your kind words, frequent check-ins and interest in my research boosted me when I needed it most. Dave, the support and accommodations you provided in the early stages of my graduate work, made this work seem manageable, alleviated stress, and allowed me to keep moving forward.

Finally, I must express my gratitude and love to Dan Lagrandeur and Lani Lauzon. You knew exactly what I needed when I needed it. From being my biggest cheerleaders and pushing me to keep going, to being a distraction and reminding me the importance of balance; your influence on this accomplishment is not unnoticed.

Thank you to everyone who listened, encouraged and celebrated with me along the way. I am so grateful for your support.

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Introduction

This thesis grew out of my experiences and concerns about the levels of stress I have witnessed amongst teachers. In searching for strategies for managing my own stress and seeking out possible solutions for mitigating the negative effects of teachers' stress on the learning environment for students, I deepened my understanding and practice of mindfulness, and developed a more comprehensive understanding of its potential within education. Early in my graduate work I was introduced to the Holistic Arts-Based Program (HAP) and immediately saw the benefits and usefulness of the arts-based methods utilized in this unique Mindfulness-Based Intervention (MBI). The study that is discussed in this thesis explored the effects of participation in HAP, an experiential arts-based mindfulness program, on teachers' stress, mindfulness, and teaching practices. I conducted my study with two small groups of educators employed by a Northeastern Ontario public school board. HAP was offered to educators as a voluntary after-school professional development opportunity to support the mental health of participants.

I begin by outlining the background of the problem and provide an overview of the project. Following this, a literature review along with the rationale for the study are provided. Research methodology, including theoretical underpinnings, reflexivity, and ethical considerations will follow. I will then share an overview of the findings from the quantitative and qualitative data analysis, and discuss the implications of the results. Limitations of the study and recommendations for future research are addressed in the concluding chapter of this thesis.

Background of the Problem

It is well documented that teachers experience high levels of stress (Collie, Shapka, & Perry, 2012; Froeses-Germain, 2014). Workload, time pressures, lack of supportive services for

students, and increasing student challenges (Taylor et al., 2016) often lead to burnout and sick leaves (Froese-Germain, 2014); teachers leaving the profession and overall unhealthy classroom environments (Taylor et al., 2016); and have negative implications for students (Flook, Goldberg, Pinger, Bonus, & Davidson, 2013).

According to Fink, stress "has a different meaning for different people under different conditions" (2017, p. 1). However, most definitions of stress refer to the body's physical, emotional and mental response to a real or perceived threat (Centre for Addiction and Mental Health, 2019; Canadian Mental Health Association, 2016; Fink, 2017). Stress can cause a number of cognitive, emotional, physical, and behavioural symptoms, such as difficulty concentrating or making decisions, feeling agitated, low morale, tension, fatigue, changes in sleep patterns, social withdrawal and/or neglecting family or work responsibilities (Centre for Addiction and Mental Health, 2019). Teachers experiencing chronic or extreme stress may have difficulty building and fostering positive relationships with their students, creating healthy classroom climates, and developing or employing effective classroom management strategies (Jennings & Greenberg, 2009).

Even with decades of research on this topic, reducing or managing teacher stress continues to be an ongoing challenge in education (Flook et al., 2013). Stress prevention and management is necessary in order to mitigate the negative effects of stress on the learning environment and to foster positive school climates (Collie et al., 2012; Flook et al., 2013). Stress prevention interventions such as organizational changes to reduce or eliminate stressors were categorized by Murphy (1988) as primary interventions. These could include systemic changes such as reduced class sizes or increased support for students. While these types of changes are crucial to the long-term betterment of our education system, secondary interventions that aim to

support the emotion regulation and resilience of teachers could prove beneficial by providing individuals with more effective ways of coping with and managing stress. A variety of these professional programs and interventions have been delivered to teachers (Jennings & Greenberg, 2009; ETFO, 2018), including Cultivating Emotional Balance (CEB; Cullen & Briot Pons, 2015), Stress Management and Relaxation Techniques in Education (SMART in education), and Cultivating Awareness and Resilience in Education (CARE; Kemeny et al., 2012). In the past decade or so, Mindfulness-Based Interventions (MBIs) have emerged as effective interventions to reduce the negative impacts of stress on individuals, and improve their health and wellbeing.

Mindfulness-Based Interventions in Education

Research exploring mindfulness-based interventions (MBIs) within education highlights the effects teacher participation in MBIs have on mitigating the negative impacts of stress on the classroom environment and on student achievement. Mindfulness is the practice of being present in the moment with an open curiosity and acceptance of whatever arises during the experience (Kabat-Zinn, 2013). Most MBIs have been developed for adults and are often based on the best known MBIs, Mindfulness-Based Stress Reduction (MBSR; Kabat-Zinn, 2013), and Mindfulness Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2012). Briefly, researchers have found that adult participants of these programs have shown increases in overall mental wellness, including increases in self-regulation, flexibility, self-compassion, acceptance, concentration, and affect tolerance (Davis & Hayes, 2011). Similarly, teachers who are trained in mindfulness have been found to have increased emotional awareness, empathy, and compassion; the ability to listen more intently; a better ability to manage classroom behaviours; and establish and maintain supportive relationships with students (Meiklejohn et al., 2012).

At the same time, increasingly, mindfulness is being incorporated into schools for students. In a recent review of mindfulness-based interventions for youth in schools, Felver, Celis-de Hoyos, Tezanos, and Singh (2016) found that many mindfulness-based interventions being delivered to students in school settings have demonstrated reductions in behavioural problems, anxiety, depression, problems with executive functioning and attention, and increases in pro-social behaviours such as emotion regulation, coping, positive affect, and classroom behaviours.

The Holistic Arts-Based Mindfulness Program (HAP) utilizes arts-based experiential methods to teach mindfulness skills and concepts to participants. HAP was developed with the specific needs of at-risk children and youth in mind (Coholic, 2019). However, the literature review that follows demonstrates that there is scant research that explores the use of arts-based mindfulness interventions with adults. However, HAP has been successfully tested with university students (Coholic, 2019), adults seeking mental health services (Coholic, Eys, McAlister, Sugeng, & Smith, 2018), and Aboriginal[1] women (Coholic, Cote-Meek, & Recollet, 2012).

Mindfulness-based interventions that address the stress of teachers as well as provide them with appropriate and accessible activities to teach mindfulness skills and concepts to their students may yield twofold results. Teachers who are less stressed and have the capacity to offer mindfulness to their students would perhaps further decrease their own stress and support their students to become more mindful.

[1] The term Aboriginal is used when referring to the population of the study by Coholic, Cote-Meek & Recollet (2012) in order to remain consistent with the terminology therein.

Although research in the area of mindfulness in education has increased significantly in the past decade, limited mindfulness-based intervention studies have been conducted within Northeastern Ontario and not yet utilizing arts-based experiential methods. I hope to contribute to the growing literature in the field of mindfulness in elementary education.

Summary of the Study

In this mixed-methods study, I examined the effects and benefits of participating in the Holistic Arts-Based Program for elementary school teachers. Qualitative and quantitative data was collected pre- and post- intervention in order to determine the effects on teachers' stress, mindfulness, and teaching practices. Group interviews were conducted and participants completed two self-report measures; the Five Facet Mindfulness Questionnaire (FFMQ) and Teacher Stress Inventory (TSI). Qualitative data was analyzed through thematic analysis as outlined by Braun and Clarke (2006). Pre- and post-scores on the quantitative measures (i.e., FFMQ and TSI) were examined through paired analysis using the Statistical Package for the Social Sciences (SPSS). The four themes that were derived from the qualitative data analysis were: (1) more accurate and comprehensive understanding of mindfulness, (2) participants' experiences learning mindfulness through experiential arts-based group work, (3) personal and professional benefits of learning mindfulness, and (4) educational consequences of teachers learning mindfulness through arts-based methods. The quantitative results showed a slight increase in teachers' self-reported mindfulness and a statistically significant decrease in teachers' self-reported stress. The quantitative data and analysis are based on the pre- and post-HAP results on the FFMQ and the TSI.

Overall, many teachers shared that their participation in HAP helped them learn and practice mindfulness in their personal and professional lives. Participants also indicated in the

post-HAP interviews that they felt better equipped to manage stress than pre-HAP, and reported lower stress scores post-HAP than pre-HAP on the Teacher Stress Inventory. Additionally, many participants indicated a strong desire and increased capacity to bring mindfulness activities to students.

HAP offers teachers experiential mindfulness training utilizing arts-based methods that appears to have led to increased understanding and practice of mindfulness, and reduced teachers' reported stress. These results are promising in the field of elementary education. Teachers who are less stressed and more mindful are more present (Miller, 2007), better able to cope with the demands of the classroom (Napoli, 2004), and better equipped to offer mindfulness training to their students (Batchelor, 2012). HAP appears to be effective for increasing teachers' mindfulness, reducing their reported stress, and improving teaching practices. Further research could strengthen and expand on these findings. Although it is beyond the scope of this study to examine the effects of teacher participation in HAP on classroom environments and student well-being, it is well-known that increased mindfulness and reduced stress amongst teachers leads to the creation of positive learning environments; thus, it appears that teacher participation in HAP leads to educational benefits.

The following four chapters include a literature review comprised of research relevant to the topics of this study including teacher stress, mindfulness and mindfulness-based interventions, mindfulness in education, and HAP. In Chapter Two, the methodology of the research thesis is described. The theoretical framework, design, program delivery, data collection, data analysis, researcher reflexivity, and ethical considerations are presented. I then present and discuss the findings from the data analysis in Chapter Three. Finally, Chapter Four summarizes the results and describes the implications of the research for education systems.

Limitations of the study and recommendations for future research and application of HAP in elementary education are discussed in this final chapter as well.

Chapter One

Literature Review

This literature review explores the need to study the benefits and effectiveness of using an arts-based group program to teach mindfulness concepts and skills to Kindergarten to Grade 12 teachers. In the following sections, I will discuss the key themes within the current literature that pertain to my research: teacher stress, mindfulness and mindfulness-based interventions, and mindfulness in education. Finally, I will describe the Holistic Arts-Based Program (HAP) and provide rationale for the research project.

Teacher Stress

A recurring theme within the literature involves the high levels of teacher stress as well as attempts to decrease the negative effects of teacher stress on students and on the classroom environment. Workload, student academic challenges, time pressures (Taylor et al., 2016), relationships with administration and colleagues, poor working conditions, and work-life imbalance (Antoniou, Ploumpi, & Ntalla, 2013; Gold & Roth, 2013; Kyriacou, 2001; Napoli, 2004) are amongst the frequently and long-time cited sources of teacher stress.

The changing structure of families and increases in students' academic and behavioural challenges also impact the role of the teacher (Napoli, 2004). Teachers' reports of stress are strongly correlated with student behavior (Pang, 2011; Yoon, 2002) and a recent study by Oberle and Schonert-Reichi (2016) linked teacher burnout to elevated cortisol levels in students. Additionally, according to the Canadian Mental Health Association (2016), anxiety and depression rates amongst adolescents are on the rise. Co-morbidity of various mental health and behavioural problems exists in an estimated 50% of children and youth (Ministry of Education,

2014). Teachers often report that difficult student behaviours can interfere with their ability to manage stressful situations that arise when teaching. Thus, increased mental health issues and student behavioural problems can make cultivating a positive learning and working environment challenging for teachers.

In 2014 the Canadian Teachers' Federation (CTF) conducted a survey of elementary and secondary teachers in which 79% of teachers indicated that their stress levels and work-life imbalance had increased over the past five years (Froese-Germain, 2014). Work was reported as the most common source of stress. The Ontario Teachers Insurance Plan (OTIP) also reported that "stress in the education sector was reported as over 75% combined from 'a bit stressful' to 'extremely stressful'" (OTIP, 2016, p.14), and 46% of the disability claims made by its members were due to mental health and nervous conditions (i.e., major depression, bipolar disorder, and generalized anxiety disorder); the highest levels of claims were made by teachers working within Special Education. (OTIP, 2016). The negative impact of stress on the teaching profession is further reported by the Canadian Teachers' Federation (CTF). Stress and mental health issues are reported to account for almost half of the long-term disability claims and high teacher turnover (OTIP, 2016). Additionally, about 60% of educators who reported health problems due to mental health issues do not take time off from work. This can further contribute to negative teaching and learning environments (Pickering, 2008).

Due to societal changes, the role of the teacher is changing (Napoli, 2004). The rise of new media (i.e., software and hardware tools that use the internet and allow interactive communication between users) (Non-Stop Media, 2015) and the emphasis on overall student wellness, impact the role of teachers. Specifically, as new media use increases (specifically smartphones and social media sites), anxiety, depression, stress levels, negative self-esteem and

self-image (Lee, Chang, Lin, & Cheng, 2014), body dissatisfaction and mood disorders (Fardouly & Vartanian, 2015) also increase. The 2015 Ontario Health curriculum document uses the term *mental health* 62 times, *gender identity* 35 times, *bullying* 48 times, and *stress* 56 times, further illustrating the impact of societal changes on educators. Teachers are not only faced with managing the impact of societal changes on their own mental wellness, but are becoming increasingly more responsible for educating on these issues as well. According to the *Supporting Minds: An Educator's Guide to Promoting Student Mental Health and Well-Being* document (2014), created in response to Ontario's mental health and addictions strategy, teachers are tasked with the promotion of positive mental health, identifying potential mental health problems, and connecting students to appropriate school or community services.

The classroom teacher and learning environment have a direct and profound impact on student achievement (Jensen, 2016). Teachers are required to be more attuned and responsive to the emotional needs of their students than previously expected. When teachers connect, empathize and build relationships with their students they create optimal learning conditions (Froeses-Germain, 2014). Positive relationships between students and teachers are fostered through teacher presence.

> Teacher presence is defined as a state of alert awareness, receptivity and connectedness to the mental, emotional and physical workings of both the individual and the group in the context of their learning environments and the ability to respond with a considered and compassionate best next step (Rodgers & Raider-Roth, 2006).

The Ministry of Education's *What We Heard: Well-Being in Our Schools, Strength in Our Society Report* (2017), indicates that student success depends heavily on student's overall well-being. It states that students must be supported cognitively, emotionally, socially and

physically in order to thrive. When students build meaningful relationships with peers and adults at school; feel connected and a sense of belonging at school; feel safe to share their feelings and ideas; develop resilience; have the knowledge and autonomy to make healthy choices; and have a positive view of self and life, they are more likely to attain success and meet their potential (Ministry of Education, 2017). However, individuals experiencing chronic stress can become highly reactive or under reactive (Keinan, 1987)**,** making it difficult for teachers to be present, respond to the emotional needs of their students and cultivate a positive school climate.

In a review of the existing literature on the integration of mindfulness training into K-12 education, Meiklejohn and colleagues (2012) found that today's teachers are not being provided with the tools and resources required to cope with stress; thus, stress continues to negatively impact the quality of teaching and learning environments provided to students. When teachers are present and more focused, skills found in mindfulness practitioners, they may be better able to cope with the demands of the classroom (Napoli, 2004). Miller (2007) proposed that mindfulness could be an effective method for improving teacher presence.

Mindfulness and Mindfulness-Based Interventions

The origins of mindfulness date back 2,500 years to northeast India, where the Buddha offered principles and practices fostering happiness and freedom through his teachings, the Dhamma (Bodhi, 2011). Mindfulness training offers people a way of overcoming suffering (Bodhi, 2011). Over centuries, Buddhist teachings were embraced and led to the emergence of various contemplative practices throughout Asia. "Buddhist meditative practices are concerned with embodied awareness and the cultivation of clarity, emotional balance (equanimity) and compassion" (Williams & Kabat-Zinn, 2011, p.3). In the 20th century, as travel became more accessible, the expansion of contemplative practices such as mindfulness meditation to the

Western world began (Bodhi, 2011). Although mindfulness originated from Buddhist meditation practices, contemplative practices have roots within other religions such as Hinduism, Judaism, Christianity, Islam (Trousselard et al., 2014) and Indigenous traditions (Sasakamoose, Scerbe, Wanaus, & Scandrett, 2016).

Mindfulness and mindfulness-based interventions have received a great deal of attention over the past decade and continue to increase in popularity. However, determining a universal definition and conceptualizing mindfulness continues to prove challenging as researchers and practitioners continue to hold varying views of mindfulness. For example, Zen Buddhist Master Thich Nhat Hanh describes mindfulness as "as the practice of being fully present and alive, body and mind united" (Hahn, 2008, p. 4). He adds that "[m]indfulness is the energy that helps us to know what is going on in the present moment" (Hahn, 2008, p. 4). Kabat-Zinn's definition of mindfulness, derived largely from Buddhist traditions, describes mindfulness as "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experiences moment by moment" (2003, p.145). Brown and Ryan define it as "the state of being attentive to and aware of what is taking place in the present" (2003, p. 822). Although many agree that mindfulness is a moment to moment process that requires attention, intention and attitude, the various definitions mean researchers are studying slightly different things and practitioners may be teaching different concepts or skills. This being said, in general, attention refers to observing and noticing the moment to moment experience (Shapiro, Thakur, & deSousa, 2014). Intention describes why one is practicing (Shapiro et al., 2014). Attitude refers to how we attend (Shapiro et al., 2014). Attitudinal qualities such as trust, open curiosity, acceptance, and patience allow for the cultivation of mindfulness (Shapiro, Carlson, Astin, & Freedman, 2006). Thus, mindfulness is the process of intentionally paying attention with an

open, curious, nonjudgmental attitude. Individuals who practice mindfulness have been found to have increased empathy, self-compassion, pro-social behaviours (Flook et al., 2013), and emotion regulation (Emerson et al., 2017).

Mindfulness practice is an exercise or process in which an individual repeatedly places nonjudgmental attention on an object such as one's breath. It requires acknowledging and accepting that thoughts will come, and gently replacing attention back on the object (Kabat-Zinn, 2012; Garland, Gaylord, & Fredrickson, 2011; Shapiro, Carlson, Astin, Freedman, 2006). Formal practices such as awareness of breath meditations, body scans, and mindful movements are practices said to cultivate mindfulness (Shapiro, Thakur, & deSousa, 2014). Informal mindfulness practice (also known as daily life mindfulness) involves intentionally bringing mindfulness concepts including open, nonjudgmental awareness to our daily activities, such as doing dishes or driving to work (Shapiro, Thakur, & deSousa, 2014). Formal and informal mindfulness practices strengthen our capacity to be mindful.

Another challenge in studying and teaching mindfulness is the difficulty in measuring the effect of mindfulness training on state and trait (or dispositional) mindfulness. State mindfulness refers to intentional, open and nonjudgmental attention to experience. It is the experience of being mindful while doing something and being present in one's body (Lau et al., 2006). State mindfulness is said to be achieved largely through the practice of mindfulness meditation, although people can experience mindfulness without practicing meditation. It is theorized that higher rates of state mindfulness lead to increases in trait mindfulness (Kiken, Garland, Bluth, Palsoon, & Gaylord, 2015). Trait or dispositional mindfulness refers to one's tendency to be mindful in day to day life (Tomlinso, Yousaf, Vitterson & Jones, 2018). It is a way of being in the world. Trait mindfulness is associated with positive psychological wellness (Tomlinso et al.,

2018), and one's tendency towards displaying a mindful disposition and embodying the attitudinal foundations may increase through the practice of metacognitive monitoring of moment-to-moment experiences (Kiken, Garland, Bluth, Palsoon & Gaylord, 2015).

Naturally, various tools have been developed to measure mindfulness. For example, the Cognitive and Affective Mindfulness Scale (CAMS; Feldman, Hayes, Kumar, Greeson, Laurenceau, 2007); the Kentucky Inventory of Mindfulness Skills (KIMS; Baer, Smith, & Allen, 2004); and the Five-Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006) were originally developed to measure trait mindfulness (Lau et al., 2006). Since then some questionnaires have been designed to assess state mindfulness, including the Philadelphia Mindfulness Scale (PHLMS; Cardaciotto, 2008); Toronto Mindfulness Scale (TMS; Lau et al., 2006); and the State Mindfulness Scale (SMS; Tanay & Bernstein, 2013).

Mindfulness training is offered to many populations through various types of mindfulness-based interventions. The Mindfulness Based Stress Reduction (MBSR), originally created in 1979 by Kabat-Zinn and colleagues at the University of Massachusetts Stress Reduction Clinic, was developed for and delivered to support the treatment of adult patients dealing with chronic pain and illness, stress, and anxiety (Kabat-Zinn, 2013). MBSR integrates Buddhist perspectives and the practice of meditation with modern medicine and science. Kabat-Zinn argues that this marriage of modern medicine and Buddhist meditation practices is not only appropriate, but a strong tool for reducing suffering (Williams & Kabat-Zinn, 2011). The MBSR program follows a structured curriculum and format offering participants training in increasing present moment awareness and an increased capacity to develop non-judgmental awareness of thoughts, feelings, sensations and experiences. This group program is taught over eight weeks and consists of 2.5-hour weekly sessions, plus a full day session near the end of the program.

Weekly sessions include various activities such as body scans, mindful breathing, walking, sitting, eating, movement (yoga), and group discussions. Participants are assigned home practice activities including formal mindfulness meditation exercises, and yoga, as well as written components in which participants record and reflect on their personal practice.

Another well-known mindfulness-based intervention (MBI) is Mindfulness Based Cognitive Therapy (MBCT), developed by Segal, Williams and Teasdale (2012). MBCT is based on MBSR and was developed specifically for patients dealing with recurring depression. It follows the same format described above for MBSR. MBCT utilizes Cognitive Behavioural Therapy (CBT) exercises in an effort to change unhelpful mindsets or thinking. It focuses on developing skills to prevent depressive relapse and mitigate the negative effects associated with depression (Segal et al., 2012).

The two MBIs described above as well as a growing number of other MBIs such as Mindful Self-Compassion (MSC; Centre for Mindful Self-Compassion, 2017), Dialectical Behavior Therapy (DBT; Linehan, 1993), and Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999) have been delivered and studied extensively with adults. The effects of MBIs on depression, anxiety, Obsessive Compulsive Disorder (Bodhi, 2011), Attention Deficit/Hyperactivity Disorder (Van der Oord, Bogels, & Peijnenburg, 2012), and addiction (Wilson et al., 2017) continue to be studied. These programs have shown improvements in the overall mental wellness of adult participants including increased self-regulation, flexibility, concentration, self-compassion, acceptance, objectivity, and affect tolerance (Davis & Hayes, 2011).

Although originally developed for the treatment of difficult to treat hospital patients and to prevent depression relapse in adults, mindfulness-based interventions have grown in their

application from clinical settings with adults to utilization with youth populations and across various contexts such as health and occupational settings, and within all levels of education. In summary, MBIs have been shown to decrease stress (Flook et al., 2013; Kabat-Zinn, 2003), anxiety, worry, tension and depression (Evans et al., 2008; Segal et al., 2012), and increase, self-esteem, focus, attention, self-awareness and empathy (Coholic, 2019). MBIs continue to evolve, addressing modern health issues and providing individuals with improved overall health and wellbeing.

Mindfulness for Children and Youth

There are a number of MBIs being implemented with various youth populations. The majority of youth interventions are adapted from the format and/or content of adult programs. For example, mindfulness-based interventions for youth such as Making Friends with Yourself (MFY; Neff & Germer, 2013), MYmind (deBruin et al., 2015), Mind Body Awareness Project (MBA; Barnert et al., 2013) and Taming the Adolescent Mind (TAM; Tan & Martin, 2013) were developed to address the unique needs and capacity of youth. MFY is designed after the Mindful Self-Compassion (MSC) program, an eight-week workshop intended to train adults to be more self-compassionate (Neff & Germer, 2013). MFY is a six-week program held once a week for 90 minutes. Each week focuses on a specific theme such as experiential mindfulness activities, brain science, and self-compassion and homework is assigned for the youth to complete. MYmind provides mindfulness training for adolescents with Autism Spectrum Disorder (ASD) and their parents (de Bruin et al., 2015). It consists of nine 1.5-hour sessions. This program requires parent participation in a concurrent mindful parenting group. Both the youth and parent programs consist of breathing meditations, mindfulness exercises, and yoga. The Mind Body Awareness Project offers mindfulness training to at-risk and incarcerated youth in California

(Barnert et al., 2013). MBA sessions run for 10 weeks, for 1.5-hours each. TAM was developed to treat adolescents experiencing psychological distress. It draws on many of the MBCT and MBSR themes and practices. Like the youth interventions described above, TAM sessions are shorter and more accessible than adult MBIs. For example, TAM incorporates short visualizations, 10-minute meditations and art activities in its hour-long sessions, whereas MBSR sessions often include 45-minute formal seated practice and/or a similar length body scan within its 2.5-hour sessions (Tan & Martin, 2013).

Mindfulness in Education

The increased acceptance of mindfulness by mainstream society has led to an explosion of interest and research into the benefits of mindfulness in education. Meiklejohn and colleagues (2012) discussed how mindfulness is being integrated into education through the following methods: (a) Mindful teaching, in which the teacher develops a mindfulness practice, embodying mindful attitudes and behaviours in their professional and personal lives, (b) Teaching mindfulness concepts and exercises directly to students by experienced mindfulness practitioners or trained teachers, and (c) A combination of direct and indirect methods, in which teachers and students participate in learning and practicing mindfulness together.

In an effort to mitigate some of the negative effects of teachers' stress on the classroom environment, some MBIs have been tested, modified, or developed specifically with the stress management needs of teachers in mind. For example, Cultivating Emotional Balance (CEB; Cullen & Briot Pons, 2015), an eight-week program blending emotional skills training with contemplative practices, was tested specifically with teachers. Although this MBI was not originally developed with the needs of teachers in mind, it contributed to the development of two education specific MBIs, Stress Management and Relaxation Techniques in Education (SMART

in Education, now smartEducation) (Ragoonaden, 2017), and Cultivating Awareness and Resilience in Education (CARE; Kemeny et al., 2012).

The Stress Management and Relaxation Techniques (SMART) was developed by CEB's primary facilitator and MBSR instructor, Margaret Cullen. Drawing heavily on MBSR's foundation and structure, SMART offers the mindfulness training provided in the MBSR program, but also includes emotion regulation and compassion training from CEB (Cullen & Briot Pons, 2015). SMART was designed to be easily utilized with various populations in education, health care, parenting groups, or sport settings. (Cullen & Briot Pons, 2015). It was initially tested within the education sector and evolved to smartEducation. It continues to offer mindfulness training to educators through the University of British Columbia while research is ongoing (Ragoonaden, 2017; University of British Columbia, 2018). Cullen and colleagues continue to develop and research the original SMART program, under the name Mindfulness-Based Emotional Balance (MBEB; Cullen & Briot Pons, 2015).

Cultivating Awareness and Resilience in Education also evolved from CEB and is modeled on MBSR's foundation and structure (Jennings, 2015). CARE is also offered as professional development for teachers. During the school year, teachers can participate in four all-day sessions in the fall with a one-day session later in the school year or as a five-day intensive retreat in the summer (Jennings, 2015). CARE utilizes mindfulness practices such as breath awareness, mindful walking, mindful listening and compassion practices to promote increased emotional awareness and emotion regulation (Jennings et al., 2017). Although CARE does not offer teachers explicit training in classroom management or in creating positive learning environments, its focus on developing teachers' social and emotional competencies and

increasing stress management capacities have shown to promote positive classroom climates (Jennings et al., 2017).

Mindfulness Based Wellness Education (MBWE) was developed in response to the high levels of teacher stress and burnout (Meiklejohn et al., 2012). In an effort to increase teacher wellness, mindfulness practices and principles are taught then applied within educational contexts (Poulin, 2009). It is offered as an elective course for teacher candidates at the Ontario Institute for Studies in Education in the University of Toronto (Poulin, 2009). The program is modeled on MBSR with minor adaptations (Emerson et al., 2017).

MBIs delivered to teachers have yielded a number of positive outcomes such as decreased stress (Flook et al., 2013; Meiklejohn et al., 2012; Taylor et al., 2016), lower symptoms of anxiety and depression (Flook et al., 2013), improved self-awareness, emotion regulation, attention, focus (Schussler, Jennings, Sharp, & Frank, 2016), efficacy in meeting the emotional demands of the classroom, forgiveness (Taylor et al., 2016), compassion, empathy (Meiklejohn et al., 2012; Taylor et al., 2016), emotional awareness (Meiklejohn et al., 2012), and lowered risk of emotional exhaustion and burnout (Flook et al., 2013; Meiklejohn et al., 2012). By supporting teachers in cultivating mindfulness and developing skills needed to cope with the professional and personal challenges of being a teacher, MBIs can have positive impacts on the learning environment and on student success (Meiklejohn et al., 2012; Smith & Jelen, 2016).

Regarding students, a large number of various mindfulness programs are being delivered in schools in different capacities. A recent review of MBIs in schools found that students' experiences in MBIs yields positive improvements in well-being (McKeering & Hwang, 2018). Some programs have been developed specifically for school delivery, while others have been modified for delivery within educational settings. McKeering and Hwang (2018) concluded that

facilitators of MBIs with students should understand and practice mindfulness, as well as understand the educational and health backgrounds of the students they are training. It is beyond the scope of this paper to describe each of these youth MBIs at length, however, I will briefly describe a few including Learning 2 Breathe (L2B; Broderick, 2013), the Holistic Life Foundation (Holistic Life Foundation, 2016), Integra Mindfulness Martial Arts (Milligan, Badali, & Spiroiu, 2015), and the Mindfulness in Schools Project (Mindfulness in Schools Project, 2018).

Learning 2 Breathe (L2B) is a prevention model that aims to empower youth, develop Social Emotional Learning (SEL) competencies, and emphasizes the importance of affective neuroscience and positive psychology to train the mind. Its theoretical foundations are based on MBSR and MBCT, and also draw from Acceptance Commitment Therapy (ACT), and Dialectical Behavioural Therapy (DBT). L2B is designed to be used by teachers in 6-18 sessions depending on time and student needs. Activities include formal seated breathing practice, mindful walking/moving, mindful observing, and body scans. Meditations are shorter in duration than those offered in MBSR (Broderick, 2013).

The Holistic Life Foundation is a non-profit organization offering a variety of mindfulness programs for children, youth and adults. They offer training in schools and within their community. The content and structure of programs offered to students by HLF vary from 15-minute breathwork and meditation implemented into the school day to 45-minute sessions twice a week for 24 weeks during resource periods (Holistic Life Foundation, 2016).

The Integra Mindfulness Martial Arts (MMA), a 20-week group intervention, is offered to youth with Learning Disabilities (LD) and/or Attention Deficit and Hyperactivity Disorder (ADHD) symptoms. In its 1.5-hour sessions, MMA integrates mindfulness, mixed martial arts,

and yoga training. MMA is a manualized program that is offered during the school day and students are excused from classes to participate in the program. Mindfulness meditation practices include sitting meditations, breath and body awareness, body scans, and walking meditation (Kabat-Zinn, 2012).

The Mindfulness in Schools Project (MiSP) offers mindfulness training for students through Paws-be and Dot-be and to teachers through Dot-be Foundations or Dot-begin. Paws-be and Dot-be teach mindfulness to students within the classroom context. Paws-be offers mindfulness concepts and training to 7-11-year-olds through six 1-hour lessons or twelve 30-minute lessons. Dot-be is a 10-week student program designed for 11-18 year old students, with sessions lasting from 40 to 60 minutes (Mindfulness in Schools Project, 2018; Kelly, 2017). Lessons for both Paws-be and Dot-be include PowerPoint presentations, worksheets, booklets, breath work, body scans, home review, and practice through online animations. Originating in the United Kingdom (UK), the MiSP currently offers mindfulness training for teachers' own practices (Dot-be Foundations and Dot-begin) along with additional training for delivery of the student mindfulness programs Paws-be and Dot-be. MiSP supports the idea that facilitators of MBIs must embody the practices they are delivering and not expect their participants to do more than they do themselves (Batchelor, 2012; Segal, Williams, & Teasdale, 2012). Teachers wanting to deliver the student programs must first complete Dot-be Foundations (or another approved face-to-face 8-week secular mindfulness course) as well as 4-day training in either Teach Dot-be or Teach Paws-be, and maintain a personal mindfulness practice (Vickery & Dorjee, 2016). Integrated MBI programs that increase teachers' mindfulness and support their resilience and emotional competence, while providing them with effective tools for teaching mindfulness, are likely to be more effective in bringing mindfulness to schools and in promoting

positive school climates (Flook et al., 2013; Meiklejohn et al., 2012). The Mindfulness in Schools Project is offered primarily in the UK and requires intense and costly teacher training (Mindfulness in Schools Project, 2018).

Holistic Arts-Based Program

The Holistic Arts-Based Program (HAP) is a 12-week MBI that was developed specifically with the unique needs of marginalized children and youth in mind (Coholic, 2019). Utilizing a strengths-based approach, HAP offers participants mindfulness training through arts-based experiential methods. It emphasizes the importance of group work by using specific activities to foster group cohesion while increasing the autonomy of participants (Coholic, 2019). The two-hour weekly sessions follow the same structure, starting with a primer (a warm up activity) to aid in transitioning to group by indicating the start of the session. The majority of each session is spent engaging in arts-based mindfulness activities, and sharing thoughts and feelings associated with the activities. A snack during the 10-minute break is offered at the midpoint of each session. A closing activity allows participants to share their thoughts and feelings about the group session (Coholic, 2019). The groups are led by two or three facilitators, offering support to participants throughout and following the program. The program has only been studied in populations in Northern Ontario and prior to this research, not with in-service teachers. It may be the first mindfulness-based intervention to offer effective and feasible mindfulness training to both teachers and students.

The HAP provides group members a safe, non-judgmental and supportive environment; promoting acceptance, connection and belonging amongst all group members (Coholic, 2019). Social group work purposefully creates a positive learning environment, promoting dialogue, self-expression, compassion, and change amongst participants (Preston-Shoot, 2007). Social

group work promotes feelings of normalization and interconnectedness, and can initiate individual or social change (Preston-Shoot, 2007). HAP facilitators engage in all activities alongside the participants, modelling group work and participation (Coholic, 2019). However, it is important to recognize that each group is unique and is affected by the particular experiences each individual group member brings to the group and the group interaction (Malekoff, 2015). Group members also play a vital role in supporting one another in ways that facilitators may not be able to (Malekoff, 2015). Social group work creates an ideal environment for facilitating mindfulness. Through group work, participants may develop a deeper understanding of mindfulness concepts such as acceptance, compassion, connection, trust and patience.

Learning mindfulness through HAP can be fun and engaging because the arts-based experiential methods provide participants a non-traditional and creative outlet to express themselves (Coholic, 2016). Arts-based methods offer individuals a nonjudgmental platform to learn about and express themselves (McNiff, 2008). Rather than interpreting or analyzing the art as might be done in some traditional art therapy practices, arts-based methods offer a form of non-verbal communication and self-expression (McNiff, 2008). The experiential art process and follow-up group discussions foster self-exploration and self-understanding, and encourage group members to gain deeper meaning about themselves and each other (Lougheed, 2016). Arts-based methods such as drawing; painting; cutting; pasting; working with sand, pastels, and clay; creative writing; and Tai Chi movements; along with experiential activities such as mindful walking; mindful eating; mindful listening; short guided meditations such as guided visualizations, breath awareness or body scan meditations; and activities such as Thoughts Jar, create a non-threatening environment in which learning and practicing mindfulness becomes more accessible (Coholic, 2019). Additionally, many traditional MBIs require extended periods

of seated meditation, whereas arts-based methods offer a less demanding way of learning the skills and concepts of mindfulness that promotes success. Although the arts-based methods utilized in HAP are intended to make learning mindfulness more accessible, it is important to recognize that this approach may not have a universal appeal as individuals unfamiliar with or disinterested in arts-based approaches may not want to engage in the program.

HAP has undergone extensive research over the past 10 years within Northern Ontario, primarily with marginalized children and youth. Overall, outcomes have been positive with an emphasis on increased attention, focus, coping skills, and self-awareness (Coholic, 2017; Coholic & Eys, 2016; Coholic, Lougheed, & Cadell, 2009). Although HAP has shown positive results with children and youth, research in its applicability with adult populations is limited. The program has been delivered to adults seeking mental health services (Coholic et al., 2018), Aboriginal women (Coholic et al., 2012), and more recently to teacher education students (Grynspan & Coholic, 2016) and university students (Coholic, 2019). The outcomes with these populations were positive suggesting that the arts-based and group methods used in HAP may be suitable methods for exploring mindfulness with a variety of populations. Findings with teacher education and university students indicate that HAP may be an effective method for reducing stress and increasing self-awareness in adult populations (Grynspan & Coholic, 2016).

Rationale for the Research

Much has been written about the high prevalence of stress amongst today's K-12 teachers. Findings from this literature review have established that MBIs delivered to teachers, such as SMART and CARE, have been successfully implemented, yielding a number of positive outcomes for teachers (Jennings, 2015; Taylor et al., 2016). Further, research has shown that

students benefit from mindfully trained teachers as well as from direct training in mindfulness (Meiklejohn et al., 2012).

HAP is an arts-based mindfulness program created to develop mindfulness skills in youth and has been successfully delivered to some adult populations. It may be a program that could be utilized to address stress management of both teachers and K-12 students within educational settings. The delivery of a mindfulness program such as HAP may offer teachers strategies to help them better deal with the demands of their personal and professional lives and allow them to foster positive learning environments. It may also offer teachers beneficial strategies to use within their classrooms to support students' emotional regulation capacities, further contributing to positive classrooms. Thus, my research study explored the question: How does participating in a 12-week holistic arts-based mindfulness program effect teachers' reported stress levels, mindfulness skills, and teaching practices?

Conclusion

This literature review demonstrated the need for stress reduction and/or stress management interventions in order to better support teachers and in ensuring healthy learning environments for students. Mindfulness and mindfulness-based interventions were described as well as their utility and current use in education. Finally, the Holistic Arts-Based Program (HAP) was briefly described. In the next chapter, I will describe the methodology including recruitment, setting, delivery, as well as data collection, data analysis techniques, and validation methods. I will share my personal and professional background and provide details describing my researcher subjectivity. Ethical considerations will also be noted.

Chapter Two

Research Methodology

This chapter describes the study design including the theoretical framework and design methods. The process of recruitment, study setting, program delivery, data collection, and data analysis will be described. The data analytic process will be outlined as well as modes of verification used to support the findings. I will then provide insight into my personal and professional background to offer transparency concerning potential biases and influences. Ethical considerations and approval will also be included in this section.

Methodology

The methodology for this research project is framed within a social constructivism framework and a relational epistemological worldview. Constructivism explains that different people experiencing the same situation construct meaning in different ways based on personal interpretations of that situation and past experiences. Individuals create understanding of the world through interactions within their groups (Crotty, 1998). As an Indigenous person, I am also drawing on relational epistemology, which is congruent with constructionism. Relational epistemology, as explained by Chilisa (2012), is the understanding that knowledge "is socially constructed by people who have relationships and connections with each other, the living and nonliving, and the environment" (p. 116). Social constructivism and relational epistemology both posit that knowledge is constructed through our experiences with the world, and our relationships and connections to people and the world around us.

This study explores the benefits, effectiveness, and feasibility of using the Holistic Arts-Based Program (HAP) for decreasing teacher stress. The HAP utilizes a strengths-based

approach and consists of three foundational underpinnings; group work, arts-based and experiential methods, and mindfulness-based practices. A strengths-based approach values the experiences and perspectives of individuals (Coholic et.al., 2011) while group work provides opportunities for members to support one another and create new understanding together based on mutual experiences (Botta, 2009). Arts-based methods "involve processes of discovery and invention." (Finley, 2008, p.72) These methods also empower participants to express themselves in a non-threatening manner, creating a starting point for dialogue and reducing the extent to which the researcher holds power within the group (Coholic, 2009). The reduction of the power imbalance between facilitator(s) and participants increases the co-construction of meaning and new understandings amongst the entire group. The strengths-based approach, use of social group work and the arts-based methods utilized in the HAP support the framework and epistemological approach described above.

Research Design

A parallel mixed-methods design was used, in which both quantitative and qualitative data was collected at roughly the same time points (Creswell, 2002). According to Denzin and Lincoln (2012), qualitative researchers attempt to make sense of the world through interpretative practices. They seek to gain insight about a phenomenon through the interpretation of rich, contextual, detailed data. Qualitative researchers use various tools and techniques in order to deepen their understandings of the way people perceive and act within the world. Quantitative researchers collect numerical data that can be used to quantify attitudes or behaviours. They aim to use data to uncover patterns and generalize results (Bryman, Bell and Teevan, 2012).

Previous literature in the delivery of MBIs supports a mixed methods approach (Coholic et al., 2012; Coholic & Eys, 2016; Hue & Lau, 2015; Schussler et al., 2016; Taylor et al., 2016).

Mixed methods use both quantitative and qualitative data and is a way for one method to support or inform the other in order to develop a more comprehensive understanding of the research question (Creswell, 2013). Triangulation uses data from more than one source or method in order to increase the level of knowledge about a particular phenomenon. It was used in this study to corroborate the quantitative and qualitative data and provide an in-depth understanding of the influence of HAP on teachers' stress.

Recruitment

A purposive sample, in which subjects were selected based on their experiences with the key concepts, was used (Creswell, 2013). A poster, displayed on the electronic classified ads folder of the Rainbow District School Board's (RDSBs) email system, was used to recruit teachers from the RDSB (see Appendix A). This poster, although intended for recruiting teachers, was accessible by all RDSB employees, including all teaching and non-teaching staff (i.e., occasional and permanent teachers; full- and part-time teachers; educational assistants; social workers; maintenance staff; administrators; as well as any other Board employee). A short description of the upcoming study was also presented at the Annual General Meeting of my teachers' union, the Elementary Teachers' Federation of Ontario - Rainbow Local, in the Spring of 2017. Snowball sampling of participants was also employed. As an RDSB teacher working in a school with over 40 staff, I had a number of colleagues who knew about, and expressed an interest in, my research project. All interested teachers were asked to contact me through email. They were asked to indicate their availability for location and group meeting times. The initial response date from each participant was recorded in order to ensure participants were contacted on a first come, first served basis. All participants who expressed an interest in the program were provided additional information about the research study through a follow-up email (See

Appendix B for Follow-Up email). Although the recruitment poster and follow-up email indicated that teachers were the target population, some respondents were not teachers. Respondents were not asked questions related to their role with RDSB until the initial interview and HAP session. It was at that time that it was discovered that non-teacher RDSB employees were interested in participating in HAP. Thus, two non-teacher employees participated in the study. Rachel, a social worker attended the HAP research study to improve her personal mindfulness practice and better support the mental health and wellness of the students she worked with; and Mary, an educational assistant, wished to develop strategies for managing her personal and professional stressors.

Because HAP utilizes an experiential learning model and supports the development of group cohesion, consideration to the size of each group was given. Group size affects the characteristics of a group. In groups larger than 12 individuals, sub-groups often form and face-to-face interaction amongst members and facilitators decreases (Jaques, 2004). Because leadership and other roles tend to be less well-defined in smaller groups, group members may have difficulty recognizing and acknowledging their feelings in groups with six individuals or less (Rice, as cited in Jaques, 2004). Thus, I aimed to create two groups, each with 6 -12 members, including facilitators. Within a few weeks of posting the recruitment poster, a total of 34 RDSB employees expressed an interest in participating in the program. Of the respondents, 23 responded to the recruitment poster, while the other 11 were through word of mouth. Due to scheduling conflicts, time commitment required for the program, and personal reasons, many interested teachers were unable to commit to the research project. Therefore, no educator who could commit to the research project was turned away. Two groups were formed with eight participants each.

Participants

The two HAP groups began in the fall of 2017. One group of educators working in a small town outside of Sudbury, but still within RDSB, requested that a group be held in their area. Initially nine participants agreed on the location, meeting dates and times, therefore we began the first group at their requested location in late October 2017. One participant did not attend and later indicated that she was unable to secure regular transportation to and from the sessions. During the group interview it was discovered that the majority of this group (7 out of 8 participants) worked within the same school and the school's learning goals for the 2017-18 school year encompassed increasing mental health awareness and improving the mental health of their high school students. This group included one social worker, one educational assistant, and six teachers. Of the teachers, one taught elementary school; the others worked at the same high school, one with students who were at risk of not graduating, one as a guidance counsellor, and the others were classroom teachers. Group Two was formed with eight participants agreeing to meet at a centrally located elementary school. This group began in mid-November 2017 and included one educational assistant, two high school teachers, and five elementary teachers.

The mean age of the participants from both groups was 44 years, and they had on average 16 years of experience. They reported working with an average of 54 students per day that ranged from one educator teaching only four students to another teaching over 170 students. There was little variance between the combined means of both groups described above and the individual means of each group. However, the average number of students taught per day was 38 students for Group One, while Group Two participants reported teaching an average of 50 students per day.

Of the 16 participants who completed the pre-group measures and interviews, 11 participants completed the program having attended at least 60% of the sessions, while five withdrew. The 11 participants who completed the program also completed post-group measures and participated in post-group interviews. Of the five who did not complete the program, two (one from each group) attended one session then notified me that they could not participate at this time as they had overcommitted their time. They indicated that should the program be offered again they would consider participating. One teacher from Group Two had surgery after the second session and did not feel well enough to attend subsequent sessions. A Group Two participant had attended regularly during the first half of the program, however when a close family member fell ill, she was no longer able to attend and sent her regrets. The final participant attended two sessions and did not respond to two follow-up emails regarding her interest in the program or request to complete post-measures. Thus, Group One ended with six participants and Group Two with five.

All six participants from Group One who completed the program participated in a post-group interview and completed the two quantitative measures immediately following the groups' final session. Three of the five participants from Group Two completed the quantitative measures and participated in a group interview one week following their final session. The remaining two participants were interviewed separately, shortly after the completion of the program. They completed the two quantitative measures at that time.

Holistic Arts-Based Program - Description and Facilitation

HAP is a 12-week arts-based program developed by Dr. Coholic and associates to teach mindfulness skills and concepts to vulnerable youth (Coholic, 2016). Using a strengths-based approach, the program encourages normalization and healthy expression of feelings. It allows

participants to develop their interpersonal skills and promotes feelings of belonging. As illustrated in Dr. Coholic's Conceptual Map in Appendix C the goals of HAP include: (1) learning mindfulness skills and concepts; (2) improving self-awareness; (3) developing self-compassion and empathy; and (4) recognizing and building strengths.

HAP is typically delivered once per week for 12 consecutive weeks, in two-hour sessions with a short snack break. At the request of the RDSBs Educational Research Council (ERC), the program was shortened to 1-hour and 15-minute sessions. Both groups began in the fall of 2017 and ended mid-winter 2018. Group One met on Mondays and was unable to meet every week due to staff meetings, holidays, school breaks, and cancellations due to weather. In order to complete all 12 sessions, the group would have spanned 24 weeks in total. Thus, we decided to condense the program to 10 sessions in total by increasing the time of the final session to 2.5 hours, which included the post group measures and group interview. The time elapsed between the start and end of the program for this group was 18 weeks. The second group met Thursdays over 15 weeks, with a two-week school break. Only one session was rescheduled with the second group due to a busy school schedule before the Christmas break amongst most of the participants.

HAP sessions took place after the school day in two Rainbow District School Board schools. One teacher at the high school location offered his art classroom as the meeting space for Group One. It held four rectangular tables, a sink and large windows displaying the school's large courtyard which was described as the school's mental health garden by the participants working at the school. We were unable to utilize the outdoor space due to the time of year. The second group met in a centrally located elementary school. The school's conference room, where we met, held two large rectangular tables. Both groups were facilitated by the primary

researcher. Two graduate students trained in the delivery of HAP provided assistance as co-facilitators. The main facilitator brought all of the equipment and supplies required for the study.

Each of the two-hour HAP sessions follow the same structure. As mentioned above, the RDSBs Educational Research Council (ERC) required the program to be shortened from 2 hours to 1- hour and 15-minutes. The HAP sessions typically begin with an ice-breaker, followed by one or two strength-based arts-based mindfulness activities. Halfway through each session there is a short snack break. The second half includes more arts-based mindfulness activities, a Tai Chi activity, as well as other experiential exercises aimed at building group cohesion and other abilities. Each session ends with a closing activity, offering participants a chance to highlight the learning and experiences of the session. Appendix D outlines the HAP session structure and includes sample activities.

In order to meet the time reduction request of the RDSBs ERC, the structure was modified slightly. The ice-breaker activities serve as a transition for the youth, providing an opportunity for them to refocus, and warm up to being in the group setting (Coholic, 2016). After the initial two sessions, most of our adult participants entered the meeting space easily and appeared ready to begin at the indicated start time, therefore the ice-breaker was not deemed essential to participant engagement and group cohesion. Even when, at times some participants arrived late, they were welcomed by the rest of the group members and facilitators and most appeared to easily engage in the activities. The participants, while unique in their personal and professional experiences, had many commonalities and most expressed a sense of comfort being amongst colleagues. Participants were offered a healthy snack throughout each session rather than stopping for a 15-minute break. The reduction of ice-breaker activities and elimination of a

formal break allowed us to engage in more arts-based experiential mindfulness activities during our reduced time together.

HAP provides many opportunities for participants to observe their thoughts, feelings and sensations in the present moment. Vulnerable youth are supported through the utilization of activities such as guided imagery readings while sculpting with clay, Tai Chi exercises as well as a variety of other informal mindfulness activities such as mindful walking, eating, and listening. Many MBIs designed for adults emphasize extensive formal mindfulness practices such as 30-40 minutes of daily breathing exercises. Each of our sessions included a 5-10 minute guided meditation drawing attention to the breath and/or sensations in the body, reflection on acceptance, letting go, loving kindness or other mindfulness concepts. Informal practices including Tai Chi exercises, mindful walking, listening, and eating were also introduced and practiced in some sessions.

The HAP is designed as a strengths-based group, building on competencies while improving coping skills. The program maintains sensitivity and safety with the goal of engaging participants by making sessions creative, interactive, and enjoyable. Throughout the duration of HAP, participants were invited to share their experiences during and after group, however they did not have to talk about difficult matters if they didn't want to do so.

Qualitative Data Collection

Before participating in HAP, a brief description of the program and the researcher's goals were described orally to each participant, either in a group or individually. Qualitative data was collected pre-and post-HAP through group or individual interviews. After obtaining informed consent (see consent form in Appendix E) and before the first HAP activity was introduced, 12 of the 16 initial participants participated in their respective group interview. Due to availability,

not all participants were able to attend the scheduled pre-group interview. One participant from each group took part in an individual interview; and two others from Group Two were interviewed together prior to their first session.

The pre-group interviews were conducted prior to the first HAP session and these were under an hour in duration. Open-ended questions were proposed to the group, and participants were asked to respond to each question in turn. See Appendix F for group interview questions.

Some of the participants in the study were colleagues of the lead facilitator. Therefore, in an effort to elicit more accurate responses from the participants, all interviews were audio-recorded and all but one of the nine interviews were conducted by another research assistant familiar with the HAP and working under my supervision and that of Dr. Coholic. Most of the pre- and post- HAP interviews were conducted by a co-facilitator delivering HAP to the teachers in this study.

Although efforts were made for all interviews to be conducted by a research assistant, this was not possible for one of the nine interviews conducted in total. Efforts including rescheduling interview appointments, offering alternative locations and a variety of times, and flexibility in the format (i.e., online or phone interviews) did not yield an agreed upon time between a research assistant and the participant. Therefore, the lead researcher conducted one of the post-group individual interviews at the requested time and location of the participant in order to ensure this participant's experience was included.

Quantitative Data Collection

The two quantitative measures, the Five Facet Mindfulness Questionnaire (FFMQ), and the Teacher Stress Inventory (TSI) were administered by the lead researcher and research

assistant to all participants pre- and post-HAP. The two measures took no more than 15 minutes to complete each time.

The Five Facet Mindfulness Questionnaire shown in Appendix G is a widely used measure of dispositional mindfulness assessing the tendency to be mindful in daily life. Participants responded to 39 statements such as "I'm good at finding words to describe my feelings" and "I think some of my emotions are bad or inappropriate and I shouldn't feel them." The answers are provided on a 5-point Likert scale ranging from (1) never or very rarely true to (5) very often or always true. After reverse scoring on some statements, higher scores denote more mindful individuals. Overall scores, as well as five subscale scores (observing, describing, act with awareness, non-judging of inner experience, and non-reactivity to inner experience) can be calculated from the FFMQ. A study by Medvedev et al. (2017) found a positive correlation between the FFMQ scores (overall and subscales) and well-being, emotional intelligence, and self-compassion, and a negative correlation between the FFMQ scores and illnesses and characteristics that negatively impact an individual's well-being such as depression, anxiety, and dissociation, supporting construct validity. While research supports the use of the FFMQ for measuring mindfulness, based on a widely used conceptualization of mindfulness (Baer et al., 2008; Siegling & Petrides, 2014), recent studies suggest the subscale of observing may not be fitting for non-meditating individuals (Gu et al., 2016; Baer et al., 2006). This will be further discussed in the analysis portion of this chapter.

The Teacher Stress Inventory (TSI) is used for identifying sources of, and manifestations of, teacher stress (Fimian & Fastenau, 1990; Fimian, 1984; Fimian, 1986). Data from 3,447 Greek teachers (Kourmousi et.al., 2015), 3,478 in-service public school teachers as well as the twice tested sample of 47 public school teachers (Fimian, 1986) showed significant internal

consistency reliability of the inventory. The study by Kourmousi and colleagues (2015) reports moderate to high convergent validity between the Teacher Stress Inventory (Greek version) and the previously validated Perceived Stress Scale-14 (Kourmousi et.al., 2015). Construct validity is supported by this same study as well as by Fimian (1984, 1986, 1988, 1990). The Teacher Stress Inventory is a 49-item measure is based on a 5-point Likert scale ranging from (1) no strength, not noticeable to (5) major strength, extremely noticeable. The tool is grouped into two sections: (1) Sources of stress (time management, work-related stressors, professional distress, discipline and motivation, and professional investment), and (2) Manifestations of stress (emotional, fatigue, cardiovascular, gastronomic, behavioural) (Fimian, n.d.). The following are two examples of statements posed on the TSI. Under the Time Management subheading of Sources of Stress: "The pace of the school day is too fast" and within the Fatigue Manifestations subheading of Manifestations of Stress "I respond to stress by sleeping more than usual." For the complete TSI see Appendix H.

Data Analysis

Qualitative Data Analysis

Thematic analysis is commonly used in qualitative analysis and involves the identification, analysis and reporting of themes or patterns across the datasets (Braun & Clarke, 2006). Thematic analysis is an overarching term used to describe various forms of analyzing data through the construction of themes. According to Braun and Clarke (2006) thematic analysis explains large portions of the data and requires interpretive evaluations of the data. It is a highly reflexive process requiring the researcher to reflect on how the data is being conceptualized (Braun & Clarke, 2006). This method of analysis is aligned with the methodological approaches

framing this study. Social constructivism and relational epistemological worldview consider that the construction of knowledge is directly impacted by the experiences of and relationships between individuals within the study and the researcher, as well as past experiences of both participants and researchers (Crotty, 1998; Chilisa, 2012). Researcher reflexivity is further discussed in a following section.

I used the six phases of thematic analysis as described by Braun and Clarke (2006) in Table 1 Appendix I. As described in phase one, I began by familiarizing myself with the data by first listening to all of the audio-recorded interviews once through. I then transcribed each interview using the InqScribe software. Following transcription, I listened to each interview audio-recording again. Before beginning phase two, in which the initial coding of the interviews was completed, I identified each groups' interviews by paper colour, for instance, all of Group One's interviews (pre- and post-) were printed on plain white paper, while Group Two's were printed on pink paper. I also used different fonts to differentiate participants. This was in an effort to ease the analysis process when deciding if themes were noted amongst many participants and/or across groups or by just a few of the participants. Pseudonyms were also given to each participant at the time of transcription. Pseudonyms were selected using the baby name generator Magic Baby Names. Each participant's pseudonym was selected from a list of similarly popular, gender specific names generated by the website.

I read through the transcriptions entirely and initial trends were noted. At this time, I was also reviewing Dr. Coholic's HAP manual as we were ending our Winter session with our youth groups and beginning our Spring session. I began coding and noticed that the program's goals, being fresh in my mind, were directly influencing the codes and themes being created. I spoke to my supervisor about what I noticed. In an effort to ensure the analysis remained inductive, and in

an attempt to remove myself from the data, I restarted the coding process with an increased understanding of the need to be aware of the factors influencing my interpretations and the importance of remaining as objective as possible throughout the process, particularly in the coding and theming stages. Re-coding yielded 67 codes. I began to look for similarities amongst the codes in phase three of thematic analysis as described by Braun and Clarke. I then grouped similar codes together, creating four initial themes. Phase four, reviewing the themes, was done primarily with the support of my supervisor. A colleague familiar with the HAP and my research also provided valuable input and support throughout the evolution of the themes. Phases four and five, "reviewing themes" and "naming and describing themes" were conducted over a few months, which involved continually going back and forth, revising and refining the themes based on personal reflection, feedback from colleagues, interviewers, and research assistants. The initial themes were: (1) personal benefits of learning mindfulness; (2) benefits of teachers learning mindfulness for improving school experiences for students; (3) more accurate and comprehensive understanding of mindfulness; and (4) perceived benefits of educators learning mindfulness through arts-based methods.

Themes one and two, "Personal benefits of learning mindfulness" and "Benefits of teachers learning mindfulness for improving school experiences for students" were merged to create one new theme describing the "Personal and professional benefits of learning mindfulness." Upon further discussion with my supervisor and colleague and personal reflection, the theme, "Perceived benefits of educators learning mindfulness through arts-based methods" was re-examined. In an effort to include a more comprehensive and accurate description of the educators' experiences of learning mindfulness through arts-based methods a new theme,

"Participants' experiences learning mindfulness through arts-based group work" was created. Theme three and four remained as listed above.

Naming, describing and refining the four themes led to the next step of extracting compelling examples to support each theme and some further refining of the theme names. In this phase, I also reread the transcriptions. In an effort to ensure the selected extracted examples were the most compelling and accurately described the intended meaning of the participants, I spoke to the interviewers and research assistants about the themes generated and the examples I had selected. This phase led to the production of a short report sent to participants describing the themes and providing an opportunity for their feedback, followed by an analysis of the themes as described in Chapter Three.

Quantitative Data Analysis

Each participant's pre- and post-subscales and overall scales were examined through paired analysis for both the FFMQ and TSI using the Statistical Package for the Social Sciences (SPSS)**.** As previously mentioned the Five Facet Mindfulness Questionnaire (FFMQ) is widely used and supported for measuring mindfulness. However, a study by Gu et al. (2016) examining the FFMQ before and after participation in an MBI, found that the FFMQ subscale of observing produced some inconsistent and unexpected results in non-meditating individuals. Similarly, in a study reviewing five commonly used multi-faceted mindfulness measures, Baer et al. (2006) reported that the observe subscale on these measures may not accurately measure the ability and tendency to observe mindfully; rather they appear to measure the extent to which an individual notices external and internal stimuli. (Baer 2006; Gu et al., 2016). Observing is to notice experience while embodying the qualities of acceptance, curiosity and purpose (Gu et al., 2016).

Gu et al. (2016) suggests excluding the observing facet from research comparing total scale/subscale scores pre- and post-delivery of an MBI. The studies described above and my reflexive practice led me to further examine the observe subscale of the FFMQ. I read through and answered the eight statements identified as observe. When reflecting on my responses to statements such as "When I take a shower or bath, I stay alert to the sensations of water on my body" or "I pay attention to how my emotions affect my thoughts and behavior" (i.e., those scored on the observe subscale), I acknowledged that pre-mindfulness practice, I likely did not have the awareness to accurately reflect how little I observed the sensations on my body or my emotions at that time. I believe that before practicing mindfulness I would not have known the extent to which I was not mindful and may have over-scored on a number of the statements. After careful consideration of the recommendations by Gu et al. (2016), previous research by Baer et al. (2006) and my own reflections on learning mindfulness, I decided the four subscales of describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience would be combined and scored to obtain a total FFMQ score thereby removing observing from the data set. This is one of the many times throughout the project in which my decisions related to the research were impacted by personal practice of mindfulness.

Modes of Verification

Because quantitative and qualitative methods are being used, triangulation was used to corroborate evidence of the findings related to teacher stress (Creswell, 2013). Additionally, Gu et al. (2016) also recognized the importance of data source triangulation when measuring mindfulness. Triangulation in this research involved the qualitative data obtained from the group interviews, the pre-post mindfulness measure outcomes, and the pre-post teacher stress measure outcomes. Participants received a list of themes and preliminary results in order to check for

accuracy of interpretations of the qualitative data. My thesis supervisor also verified processes and decisions related to the quantitative data as well as interpretations of the qualitative data. Dr. Coholic guided and supported triangulation through discussions and feedback regarding the overall interpretations. Additionally, I addressed some biases by being explicit regarding my background, influences, and personal gains regarding the study.

Researcher Reflexivity

Reflexivity is described as explicitly situating oneself within the research and self-disclosing how past experiences strongly influence the unfolding of the project. Reflexive researchers share their personal and professional backgrounds; acknowledging not only that their own experiences influenced the study, but offer the reader insight into how those experiences contributed to the research topic, question, methodology and interpretation of data. Qualitative research is impacted by the experiences, biases, assumptions and interpretations of the researcher; the interpretations presented in this paper were constructed through a variety of lenses (Creswell, 2013). This section will aim to offer the reader explicit details about my background and biases, and my analysis of the multiple roles I held throughout the research.

I was raised in a dual income family in Northern Ontario for most of my childhood. I am the second of three girls. My parents have always supported and encouraged our educational pursuits as well as personal growth. My mother was the only one of her siblings not only to attend post-secondary school, but achieve high levels of academic and professional success. It is important to acknowledge that my understandings of the world are framed within the cultural beliefs and ways of knowing of the people of the Temagami-Anishinaabe territory, shared with me through my familial relationships. The understanding that people connect themselves with those around them, in mind, body and spirit are rooted in the teachings passed down through my

Anishinaabe grandmother and mother. My maternal grandmother worked tirelessly to improve the lives of those within her community, advocating for marginalized people and fostering the development of positive youth involvement. My passion for healing and facilitating change is undoubtedly influenced by the work of my mother and grandmother embedded in my upbringing and shaping my worldview.

Being a full-time teacher for almost 15 years I have experienced chronic and acute stressors which impacted all areas of my life. Stressors I experienced in my teaching practice were often directly related to challenging student behaviours and their mental health issues. However, other work demands such as parent meetings, documentation, pace of the school day, number of students, assessment, and planning, also added to the work-related stressors I faced. Efforts to meet the responsibilities related to teaching and caring for 30 students, made it challenging to be present in my personal life and maintain work-life balance. Caring for and providing a loving home environment for my three young children has always been my priority, as I imagine it is for many parents. I felt unequipped and under-supported professionally in my efforts to teach full-time and ensure my own children's needs and my personal needs were met.

In an attempt to relieve some of the stress I was experiencing, I reluctantly agreed to take a short-term sick leave. It was on this leave that I began an informal mindfulness practice, focusing on the present moment, becoming less judgmental of myself and of others, and increasing my self-awareness. It was the beginning of my own healing. Through my mindfulness practice, I learned to accept myself, and instead of feeling as though I was a failure for 'only working part-time', I began to see the value and magnitude of the work that I did each day. Following my stress-related sick leave, and in an effort to maintain a healthier work-life balance, I chose to take two part-time unpaid leaves from my teaching position. While this added to

financial stressors, working part-time allowed me time to work towards personal wellness and better balance, which outweighed the financial impacts. Throughout my time off, and through my mindfulness practice, I gradually became less judgmental of myself in relation to my 'inability' to work full-time and began to openly discuss how working part-time offered me a reprieve from the challenges I was facing. A number of colleagues confided in me, claiming that my vulnerability and openness helped them voice their own struggles and contemplations of leaving the profession due to chronic stress. Others discussed reducing their workload by taking leaves of absences or moving to other positions within the school board. Although I didn't realize it at the time, these experiences have been instrumental in the development of this research.

It was when I returned to teaching full-time that I recognized that my students' mental health and behaviours were the greatest contributors to the high levels of stress in the classroom, amongst the students as well as myself. Wanting to learn ways to better support my students, I began my Masters in Interdisciplinary Health. I was introduced to the HAP and began co-facilitating the mindfulness-based program with youth. My initial intent for learning HAP was to develop a deeper understanding of mindfulness concepts and to enhance my skills and competencies for delivering the HAP as part of Dr. Coholic's research program at Laurentian. I also immediately saw the potential benefits of HAP to increase students' self-awareness and expression in elementary school and found myself bringing activities back to my class. I recognized that adjustments to the activities were needed in order to accommodate students' needs and the classroom setting as well, specifically regarding the lack of support when issues arose. Thoughts Jar, shown in Appendix J, is a foundational activity in HAP, which conceptualizes mindfulness in a concrete and experiential way. In this activity, participants take

turns expressing their thoughts and emotions while dropping a bead into a clear glass container. Once everyone has shared, the jar is shaken representing our busy minds. When the jar is placed down, the beads settle demonstrating that mindfulness is not about clearing your mind or ignoring thoughts and feelings; rather mindfulness provides the opportunity for us to identify our emotions and respond from a calmer state. When bringing activities such as this to the classroom, consideration must be given to the safety risks involved in bringing a number of glass jars to the classroom or alternately the availability and storage of clear plastic leak proof containers. Additionally, in an effort to increase students' comfort in sharing their thoughts and feelings, small groups were formed. Students enjoyed sharing their thoughts and feelings within their groups, however it is not possible for me to hear what each student shares and very challenging to even stay with one group due to the high demands of the classroom. While this activity was well received by my students, I recognize that the quality of and level of inquiry I can offer to students is not the same as what they might experience in a HAP group. When delivering HAP to teachers, questions often arose as to how they might bring HAP to their classes. My experiences of bringing some activities into the classroom and the modifications I made allowed me to share my reflections on the usefulness and effectiveness of some of the HAP activities in a classroom environment.

Initially, the purpose of the delivery of HAP to teachers was unidirectional. The idea of delivering HAP to teachers was, in my view, an effort to support teachers in offering mindfulness to their students. Through the reflexive process I began to understand how learning mindfulness through HAP helped me twofold. Not only did I learn mindfulness activities to help students and the youth I was working with, but I also developed a deeper understanding of mindfulness through the experience. My own self-awareness and personal mindfulness practice

increased throughout my participation and co-facilitation of HAP. Meditation has become a daily practice since my training in HAP and I recently completed the Mindfulness-Based Stress Reduction (MBSR) program in an effort to enhance my formal practice and deepen my understanding of the concepts. Mindfulness has been instrumental in mitigating the negative impacts of stress on my well-being and in connecting and building stronger relationships.

Throughout the project, there were many times where I experienced more stressful situations, however, mindfulness helped me cope with the challenges and respond in helpful ways**.** For example, prior to my proposal of the project, there was a labour dispute between Laurentian University and Laurentian University Faculty Association. This caused a short delay in my research. I did not have a strong adverse physical reaction to the situation and was more accepting of the situation, which I believe was due to increased acceptance of events and my lack of control as well as patience to allow things to unfold in their time, both of which are virtues continually being cultivated in my mindfulness practice. I realized that my response was different than what it may have been prior to practicing mindfulness when I spoke to a fellow student who was also impacted by the labour dispute. We spoke about the situation, and during the conversation I could hear her frustration and see the physical responses to the stress she was experiencing. As she listed a number of ways the delay may affect her research, I saw my 'old' reactive self in her and recognized that my response to this situation was much different than it may had been the previous year. I did not feel the adverse physical reactions I had previously experienced during stressful situations, nor did I get caught in negative thought patterns. I thought the situation was irritating, but also recognized that it wouldn't last forever. My response was knowing I would be able to continue with my project in due time. Through my reflection on

this situation, I realized that my personal practice of mindfulness was allowing me to experience situations in a different way than I may have without a mindfulness practice.

My personal mindfulness practice also helped me build confidence and throughout the past two years, I've become a lot less judgemental of myself. Self-judgement and expectations of perfection plagued my past. The cultivation of mindfulness in my life has fostered the development of self-love and compassion. It is through this non-judgemental attitude that I have been able to continue working on my thesis through familial responsibilities, work commitments and some minor delays such as the one described above; and not get caught up in negative self-judgement.

The non-judgmental attitude I have developed through my mindfulness practice has been instrumental in the unfolding of this research project. This was evident throughout the facilitation of the two HAP groups. An important component of the HAP is in creating a welcoming and non-judgmental environment where participants feel safe participating in activities and sharing their thoughts and feelings. It was necessary that I not only spoke of the importance of non-judgement, self-love and compassion, but that I modeled that attitude each week. Mindfulness made this more possible, but also allowed me to recognize and accept when I was self-judging. Acknowledging that mindfulness is a practice and sharing my journey with participants, helped create the safe space for participants to learn and to share the challenges they experienced.

It is important to recognize the interconnectedness and interrelationships that existed and evolved throughout the research process as well. My primary role was that of student researcher and facilitator of HAP. However, I am also a teacher, colleague, friend, parent, and fellow union member, providing me with a unique perspective in facilitating HAP with teachers. During the first few weeks, I was highly aware of how the many roles I played affected my interpretations of

the groups' success. For example, in week two, when one participant did not attend, I wondered where she might be. I thought I would call her to find out why she wasn't there, but was cognizant to ensure that my reaching out came from a facilitator and researcher perspective. I didn't want her to feel as though she had to continue coming because we were colleagues. The relationships between myself and the participants as well as between participants proved to have a positive impact on the study overall. This will be discussed in greater detail within the next chapter of this paper.

Further, the research described herein began in response to student mental health issues, and has influenced my future role as an educator. As I complete my master degree, I will begin the role of Student Success Teacher, and while this role is described as building relationships with students and supporting students in achieving school success, I see this role as much bigger than that. The reflexive process and this research have contributed to the constant shifting and reshaping of my teaching practices. As part of my role next year, I plan to offer a space and time for teachers to get together and work through their stressors in order to better support students. Additionally, I planned a three-day summer training workshop for members of my teaching union, Elementary Teachers' Federation of Ontario, and offered educators professional development in arts-based mindfulness.

Ethical Considerations

Ethics approval by the Laurentian University Research Ethics Board (REB), for the implementation of HAP and the collection of data, was obtained in October of 2017. See Appendix K for Laurentian University's REB approval. An ethics application was submitted to the Rainbow District School Board's Educational Research Council in January of 2017. Ethics approval was given by the Superintendent via email in April of that same year. See Appendix L

for a copy of the formal approval letter obtained in June of 2018. Consent forms were completed by each participant prior to participation in HAP. Every effort was made to ensure the anonymity of participants. See Appendix E for the Teacher Consent Form. All of the information collected has remained confidential and data was double-locked at the University in Dr. Coholic's Qualitative Research Lab. Pseudonyms were applied to each participant and the one male participant was contacted to ensure the pseudonym and pronouns used were acceptable as the male pseudonym I selected may increase the likelihood that he be identified.

Summary

This chapter described the mixed-methods design, constructivism approach and relational epistemological approach shaping this project. My professional and personal background influencing the unfolding of this research project were revealed. Additionally, the target population, recruitment, participation setting, and program facilitation were described. Processes related to data collection and analysis were shared, along with modes of verification. Finally, ethical considerations and approval processes were described. In the following chapter I will provide detailed descriptions of the findings as well as their connections to the current literature in this field.

Chapter Three

Data Analysis and Interpretation

In this chapter, the results and findings from this mixed-methods study are presented. I start with providing the results from the quantitative data analysis, which is followed by the results from the qualitative data analysis. Four themes were derived from the qualitative data and will be described in this chapter. The themes are: (1) more accurate and comprehensive understanding of mindfulness, (2) participants' experiences learning mindfulness through experiential arts-based group work, (3) personal and professional benefits of learning mindfulness, and (4) educational consequences of teachers learning mindfulness through arts-based methods. The data and analysis are based on the results of evaluating teacher participation in a 12-week arts-based mindfulness group program.

Quantitative Data Interpretation

Five Facet Mindfulness Questionnaire

Each participant completed the Five Facet Mindfulness Questionnaire (FFMQ) and Teacher Stress Inventory (TSI) measures pre- and post-group. The FFMQ is used to measure one's tendency to be mindful in daily life and its use is supported within research. Appendix G provides the questions used on the FFMQ. This measure asks participants to respond to 39 statements and provide answers on a 5-point Likert scale. The results can be derived by calculating the scores of all the statements or all of the statements from one or more subscales. The five facets of dispositional mindfulness used on this measure are based on a widely used conceptualization of mindfulness (Baer et al., 2008; Siegling & Petrides, 2014) and are described by Baer (2008) as: (1) observing, (2) describing, (3) acting with awareness, (4) non-judging of

inner experience, and (5) non-reactivity to inner experience. Responses are calculated with reverse scoring on some statements. Higher scores indicate more mindful individuals.

Although the use of the FFMQ for measuring mindfulness is well supported by research (Baer et al., 2008; Siegling & Petrides, 2014), recent research identifies some drawbacks to the effectiveness of some self-reported mindfulness measures including the FFMQ (Gu et al., 2016; Wong et al., 2018). To begin, research by Wong et al., (2018) suggests that individuals without mindfulness training may not accurately respond to questions on a mindfulness measure and thus not evaluate their level of mindfulness accurately. In my study, participants were asked to introspectively rate statements from the FFMQ on a Likert scale. However, pre-HAP interviews indicated that most individuals lacked a comprehensive understanding of mindfulness, thus, they may not have accurately assessed their level of mindfulness pre-HAP. For example, participants were asked to respond to the statement "When I take a shower or bath, I stay alert to the sensations of water on my body" (Baer et al., 2006). A person who is unaware of the focus of their attention throughout the day, may not accurately answer questions such as these, thereby affecting the quality of the pre-group data. Most mindfulness scales, including the FFMQ used in this study, rely on introspective evaluation in regards to one's level of mindfulness. Therefore, factors such as social desirability, experimenter demand, and knowledge about mindfulness concepts and practices may affect the accuracy of self-reported mindfulness measures. In addition, the concepts and attitudinal foundations of mindfulness are complex, thus adding to the challenge of accurately and effectively measuring one's level of mindfulness. Participants without previous mindfulness training or those with limited exposure to mindfulness concepts may have difficulty understanding and accurately responding to questions posed by measures such as the FFMQ (Wong et al., 2018).

Additionally, research by Gu and colleagues (2016) suggests that the Observing subscale of the FFMQ may not be valid in evaluating changes in mindfulness pre- to post-intervention. Specifically, they reported that differences in overall FFMQ scores pre- and post-MBI may not be accurate when the Observing subscale is included (Gu et al., 2016). It was suggested that differences in pre-and post-intervention scores on this subscale are perhaps due to changes in one's tendency to notice experiences and that changes are not necessarily due to a change in one's ability to notice experiences mindfully (Gu et al., 2016). That is, Gu and colleagues posit that the subscale of Observing does not reveal the changes in one's tendency to embody the foundational concepts of mindfulness such as acceptance and curiosity. The following example from the FFMQ demonstrates their claim: "I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing" (Baer, 2006). In this example, a higher score regarding one's tendency to attend to environmental sounds does not necessarily indicate a higher level of mindfulness. The above example asks individuals to report on the extent to which they attend to sounds, but does not provide insight into the attitude they hold while attending. Thus, this statement, and others on the Observing subscale, disregard the importance of some of the attitudinal concepts including nonjudgmental awareness, acceptance, and open curiosity. Recommendations were made by Gu and colleagues to exclude the Observing subscale when scoring the FFMQ for detecting changes pre- and post-intervention. On the basis of this recommendation, the pre- and post-results obtained from Observing subscale were excluded in the analysis of the FFMQ scores in this study. With all of this in mind, self-reported measures are still the most commonly used method for measuring mindfulness (Bergomi et al. 2013; Sauer et al., 2013) and the FFMQs results (with the Observing subscale omitted) are considered valid.

For these reasons, the FFMQ was administered pre-and post-HAP to measure changes in mindfulness.

Teacher Stress Inventory

The Teacher Stress Inventory is a self-reported, 49-item measure used to identify sources and manifestations of stress (Fimian & Fastenau, 1990; Fimian, 1984; Fimian, 1986; Fimian, 1988). Responses are based on a 5-point Likert scale and are grouped into two sections: (1) sources of stress, including the items related to the subscales time management, work-related stressors, professional distress, discipline and motivation, and professional investment; and (2) manifestations of stress, including the subscales emotional, fatigue, cardiovascular, gastronomic, and behavioural manifestations. Appendix H provides the questions used on the TSI.

Results can be calculated by scoring the responses to all 49-items or scoring the responses from one section only (sources of stress or manifestations of stress). Higher overall scores denote greater stress. Higher scores on the subscale sources of stress indicate greater impact of stress factors, while higher scores on the manifestations of stress subscale indicate greater self-reported symptoms and behaviours related to stress. This inventory has been tested with over 7,000 teachers and continues to be used in research concerning teachers' stress. (Fimian, 1986; Kourmousi et.al., 2015). The TSI is deemed a reliable and valid method for measuring teacher stress (Fimian, 1986; Kourmousi et.al., 2015). Scores can be compared to the established norms. TSI norms were established for teachers as a whole group; regular or special education teachers; male or female teachers; and elementary, middle school, or secondary teachers (Fimian, 1988). Although, most of the data used to establish the norms for this measure were collected from outside the geographic region of this study, the scores from this study were compared to the norms for all teachers (Fimian, 1988). Given the small sample size of this study

(n=11), the information provided by utilizing these norms could be used to establish a more comprehensive understanding of the effects of HAP on teacher stress. Teachers' pre- and post-HAP scores were compared to the relative strength of stress levels and standings in one of three categories: (1) significantly strong, (2) moderate or (3) significantly weak. Individual teachers' standings were compared pre-and post-HAP. This comparative data was used along with the paired t-tests administered on TSI and the FFMQ data, and the results from the qualitative data analysis to generate a more thorough understanding of the effects of HAP on teacher stress.

Paired t-tests are widely used to examine whether significant differences exist between two sets of population means. Frequently, a paired t-test is used to compare "before-and-after observations on the same subjects" (Shier, 2004, p.1). This test was selected and utilized as the method for analyzing the quantitative data in this study because I was interested in exploring whether significant changes in self-reported stress and mindfulness existed pre- to post-group.

Results

The results from pre- and post-HAP scores on the FFMQ indicate a slight increase in mindfulness. Eight of the 11 participants who completed the program reported higher levels of mindfulness post-HAP than pre-HAP on the mindfulness measure. The paired t-test performed on the data collected from the FFMQ produced a p value of .053. These results indicated no statistically significant change on the FFMQ ($p > .05$). Wong and colleagues (2018) proposed that without mindfulness training individuals may respond to questions used in evaluating mindfulness inaccurately. Thus, perhaps the changes in mindfulness reported on the FFMQ were deemed not statistically significant due to a lack of thorough understanding of mindfulness concepts pre-HAP. That is, pre-HAP participants may have inaccurately measured their level of mindfulness due to their lack of training in and/or understanding of mindfulness.

The results from the paired t-test conducted on the TSI scores showed a statistically significant ($p < .05$) decrease in teachers' reported stress pre- and post-HAP. Significant decreases in teachers' reported overall stress ($p = .001$), sources of stress ($p = .002$) and manifestations of stress ($p = .018$) were reported. The degree of the differences on the TSI can be better understood using effect size. Effect size is described by Sullivan and Feinn as "the magnitude of the difference between two groups" (2012, p. 279). In this study the effect size helps in understanding the extent of the changes observed pre- and post- HAP. According to Kourmousi et al. (2015) effect sizes of 0.8 or greater on the TSI are considered large. The effect size calculated on the TSI in this study was 1.01 and is therefore considered large. However, as Fan and Konold (2010) pointed out, a large effect size could incorrectly be obtained in small sample sizes.

To further examine the effects of HAP on teachers' stress, overall stress scores were compared to the norms reported by Fimian (1988). Table 1 displays the norms established by Fimian (1988, p.16)

Table 1

TSI Total Score Ranges by Significance of Teachers

Category	Range
Significantly strong	3.28 or above
Moderate	1.94 to 3.27
Significantly weak	1.93 or below

Pre- to post-HAP some participants reported changes that when compared to the established norms above indicated a significant change. Pre-HAP, eight participants' overall TSI

scores were in the moderate range. Three reported significantly strong stress. Post-HAP six participants scored in a different category than their pre-HAP category. Five participants were placed in a lower strength category while one participant was placed in a higher strength category. Specifically, three participants aligned with the moderate category pre-HAP were categorized in the significantly weak category post-HAP; two teachers initially placed in the significantly strong category reported scores within the moderate range post-HAP; one participant initially in the moderate range increased categories post-HAP to the significantly strong range.

Although a small sample size could compromise the results obtained, the quantitative data results suggest that participation in HAP increased teachers' reported level of mindfulness and decreased their reported stress levels. First, the overall p value, and the p value on the sources and manifestations subscales indicated that there was a very low chance that false positives were detected (0.1%, 0.2%, and 1.8% respectively). The effect size on the TSI was deemed large. Also, in regards to the stress measure results, some participants' stress level decreased in terms of the strength of stress as outlined by the norms. Additionally, the mean mindfulness scores obtained increased pre-to post-HAP; and although the change in scores were not deemed statistically significant, a limited understanding of mindfulness by participants may have affected the pre-HAP scores. Perhaps more importantly, given the small sample size, it is important to note that the quantitative data analysis is convergent with the qualitative data analysis.

Qualitative Data Interpretation

This study concluded with 11 participants; nine were teachers (one of whom was a male), one educational assistant and one social worker. All participants who completed HAP participated in either a group or individual interview. The qualitative data collected through the pre- and post-group interviews were analyzed using thematic analysis as outlined by Braun and Clarke (2006). The four themes derived from the analysis are: (1) more accurate and comprehensive understanding of mindfulness, (2) participants' experiences learning mindfulness through experiential arts-based group work, (3) personal and professional benefits of learning mindfulness, and (4) educational consequences of teachers learning mindfulness through arts-based methods. Next, each of these themes will be discussed.

More Accurate and Comprehensive Understanding of Mindfulness

Mindfulness is a complex concept with varying definitions and conceptualizations (Grossman, 2008). However, most experts, researchers, and practitioners agree that mindfulness "characterizes some aspect of attention to experience in the present moment" (Grossman, 2008, p. 405). Before the HAP group, most participants demonstrated an understanding of mindfulness that included this aspect, describing mindfulness as being in the present moment and being aware of their thoughts and feelings. For example, pre-HAP, Karen[2] described mindfulness as "being present in the moment… being aware of your surroundings [and] your feelings." Likewise, Jessica stated that mindfulness is "being in the present, not constantly thinking about the future

[2] Pseudonyms were used to promote anonymity of participants.

or the past or being lost in your thoughts. Just ... taking the here and now and acting with [it] instead of ...being elsewhere… in your thoughts".

Mindfulness, however, is more than present moment awareness and as pointed out by Grossman (2008), original Buddhist definitions of mindfulness "intimately connect moment-to-moment paying attention to the cultivation of knowledge, positive emotions such as kindness and compassion, and even ethical behavior related to the principle of doing no harm" (p. 405). Thus, the cultivation of mindfulness requires much more than awareness of thoughts, feelings and surroundings. Coholic (2019), developer of HAP, emphasizes the embodiment of qualities such as curiosity, self-compassion, and non-judgmental self-awareness as integral in the cultivation of mindfulness.

The theme "more accurate and comprehensive understanding of mindfulness" describes the deepened understanding of mindfulness that participants expressed through their participation in HAP to include qualities such as self-awareness, non-reactivity, openness, acceptance, non-judgment and self-compassion. After participating in HAP, many participants demonstrated an increased understanding that mindfulness training changes your way of seeing and being in the world.

In the post-group interviews participants frequently mentioned that they had increased self-awareness and found themselves more aware of their thoughts, feelings, and surroundings throughout their daily lives. The following quote by Karen demonstrates her experience of being present in her daily life:

> I catch myself much like Holly … catching that ray of sun, when it's been cloudy all day and just really soaking in that moment. Or out walking the dog and I'm really just

> enjoying the sound of the snow or the feel of my snowshoes going through the … crust or the birds outside or whatever it is… Just catching myself being a little more aware.

Mary also said that HAP increased her self-awareness and awareness of her surroundings as shown in the following quote:

> I think through HAP I would ... say that I did learn to acknowledge my internal feelings and like take a personal inventory more often and it kinda reaffirmed for me to make sure that I act and not react so stay calm and do the breathing. Where you kinda know those things, but through HAP you learn tools that you don't have to put in your pocket and carry them in a bag. They're there. You don't need a whole lot of material to do these activities. And you can you know be creative, to continue like to be objective and see things in a new light and like try and see like beauty in the things that surround you and that you kind of forget about so I'd say that's definitely what I've learned through HAP.

Participation in HAP brought a greater sense of openness, awareness and acceptance to many of the participants demonstrating that most participants developed a deeper understanding that mindfulness is a way of being in the world, not only a set of skills to be mastered.

Many participants shared how participation in HAP helped them understand the value of embodying qualities such as self-compassion, non-judgment, acceptance and awareness through cultivating mindfulness in their lives. These concepts are introduced in Week 1 through the creation of the Group Rules and introduction of the Thoughts Jar activity. In Week 2 of HAP, an arts-based activity supporting participants in deepening their understanding of these mindfulness concepts is introduced. For example, in Painting on a Line (illustrated in Appendix M), pieces of paper are clothes-pinned on a line hung across the room. Participants and facilitators are challenged with painting on the paper without touching the paper or the line. This experiential

activity teaches mindful awareness, and offers participants an opportunity to discuss and reflect on the concepts of non-judgment, self-compassion, acceptance, and non-attachment. The discussions that followed this activity described the challenges participants faced and the feelings that arose throughout the activity. Participants shared how their original idea changed and how the feelings that arose throughout the activity could reflect how accepting one is and how he/she responds to challenges in daily life. Additionally, participants discussed how they were all affected by one another. The line shook as each participant painted which impacted the outcome of one another's painting. Figure 1 shows the results of one groups' Painting on a Line activity. Karen, whose art resembles long grass separated by a stream of water is displayed fourth from the left. She described how she had an idea to paint a view from her cottage. The end result was not what she had in mind as it did not accurately represent the view of the water from her cottage. Initially, Karen expressed that she was not happy with her painting. However, following the group discussion surrounding acceptance, self-compassion and non-judgment, she shared that contrary to her original judgment of herself and her artistic ability, she was accepting the beauty of her painting, at least for what the experience taught her about herself.

Research has found that participation in an even low-intensity mindfulness course may lead to decreased self-judgment (de Bruin, Meppelink, & Bogels, 2015). This supports the observation that only two weeks into HAP, Karen was becoming more mindful, which was demonstrated through her increased self-compassion and decreased self-judgment.

Figure 1. Painting on a Line Activity

Figure 1. In the Painting on a Line activity participants are invited to paint on pieces of paper hung across the room without touching the paper or the line. Following the activity, mindfulness concepts including non-judgment, self-compassion, acceptance, and non-attachment are discussed.

In the post-HAP interview, Rachel describes the mindfulness concept of acceptance in her description of the Painting on a Line activity. Rachel said,

> I really liked painting on a string and implemented it immediately (with students) … [be]cause just that really relinquish of control and ... you have this perfect vision in your head of what you're going to create and then it does not end that way… I really like that one.

Throughout the 12-week program, participants increasingly commented on their intent to become less judgmental and demonstrate more self-compassion. They also demonstrated an increased understanding of the importance of remaining open and unattached to outcomes as situations and events unfolded. The following quote by Karen demonstrates recognition of her own self-judgments and difficulties with self-compassion:

> I think challenges were again, time and scheduling that time, and not feeling guilty for taking that time. And letting go of all of those things so that this was a mindful place. In the beginning I found it much harder to let those things go; they'd creep into my thoughts

> as we were meditating or doing an activity. I think I've learned though to let them go so that I've enjoyed them [the activities in HAP]. I think I've learned to let go too, to let go of some of the control - in and just let it happen. It doesn't have to be the best artistic thing or whatever... Just get in there and start and try it so it's always that challenge of [not]judging yourself- that it's not going to be good enough.

Holly shared that she understood how her initial self-judgments impeded her self-expression. Through her participation in HAP she began to exhibit the quality of self-compassion, allowing her to increase her self-awareness and express herself more openly. Holly stated:

> I learned to just let go and draw whatever I wanted to do whatever I wanted and not feel self-judgmental ... it felt really good, the textures, the smells; just to feel more self-aware in everything you do and it can just be for fun.

The concept of non-striving was identified by participants in the post-interviews as non-judgment and acceptance of their art or of themselves. For example, the participants' understanding of the concepts of non-striving or being unattached to a particular outcome was demonstrated when Ryan said, "there's no judgment to it [the art], there's no mark, there's no expectation even if you don't finish it that's fine." He alluded to doing his best, staying present in the experience of creating without attachment to a particular outcome.

Post-HAP, Elizabeth also demonstrated some understanding of the concept of non-striving. When reflecting on her favourite activities, she commented in the post-interview, "How do you make art out of a pile of sand?" then added to her reflection that "I guess those were my

favourites. Just the sense of like playing and having fun with it". During the Sand Memories activity, Elizabeth was observed exploring the sand slowly and seemed to be observing what other participants were doing at first. However, that seemed to shift when she allowed herself to be playful and enjoy the activity and focus on the memory she was recreating.

These examples outline how participants were able to let go of self-judgments, be present and allow things to unfold naturally, which represents a more comprehensive understanding of mindfulness-based concepts including acceptance, non-judgment, self-awareness, non-reactivity, self-compassion and openness.

Participants' Experiences Learning Mindfulness Through Experiential Arts-Based Group Work

The theme "participants' experiences learning mindfulness through experiential arts-based group work" describes how the arts-based and experiential methods utilized in HAP supported participants in developing a more comprehensive understanding of mindfulness and increasing their self-awareness. The unique learning environment created through the methods employed as well as the purposeful use of the group fostered a more comprehensive understanding and embodiment of mindfulness. Participants also shared that they enjoyed HAP as it created a fun and safe place for them to allow themselves to be vulnerable, open and authentic while learning new or challenging concepts and learning about themselves.

Experiential learning theory acknowledges and draws on the experiences of individuals in learning and change (Matsuo, 2015). Most traditional mindfulness-based intervention programs recognize the importance of experiential methods, offering participants ample opportunity to engage in awareness practices to cultivate mindfulness such as breath awareness and body

awareness exercises (Kabat-Zinn, 2013; Segal et al., 2012). Experiential and arts-based methods employed in HAP help create a non-threatening, enjoyable, and engaging environment that make learning mindfulness more accessible than traditional methods (Coholic, 2019). Participants of HAP engage in a variety of experiential methods that support their understanding of mindfulness.

Post-HAP, some participants indicated that some of the abstract mindfulness concepts introduced and discussed throughout HAP became more concrete through the use of arts-based and experiential methods. The arts-based methods utilized in HAP fostered the development of a more comprehensive understanding of mindfulness and increased self-awareness amongst participants. Thoughts Jar, an activity introduced early in HAP, is an experiential activity in which participants are invited to share thoughts and feelings experienced throughout their day by placing beads into a jar of water. Once each group member shares, the jar is shaken resembling our racing minds. A common misconception is that mindfulness is about emptying your mind of thoughts and feelings (Teper, Segal & Inzlicht, 2013). However, the beads remain in the jar, and over time begin to settle at the bottom or float along the top of the water. In the discussion following this activity, attention is drawn to the beads and it is explained that mindfulness is not about removing thoughts or feelings, rather it is a way for us to see them more clearly so that we can make decisions about our feelings and thoughts rather than reacting.

Figure 2 shows the Thoughts Jar activity before and after practicing mindfulness. This activity allows individuals to self-reflect and to share and listen in a safe, non-threatening way. It offers a creative and non-threatening representation of how the cultivation of mindfulness can enable us to see things more clearly, encouraging distance between thoughts and emotions and reaction. Mindfulness allows us to respond to adverse situations rather than mindlessly reacting. Additionally, the sharing of thoughts and feelings in a safe, nonjudgmental space offers

participants the opportunity to self-reflect and increase their self-awareness, which are key practices involved in increasing one's level of mindfulness. Thoughts Jar is an example of one of the various activities utilized in HAP to help cultivate a concrete understanding of mindfulness.

Figure 2. Thoughts Jar Activity

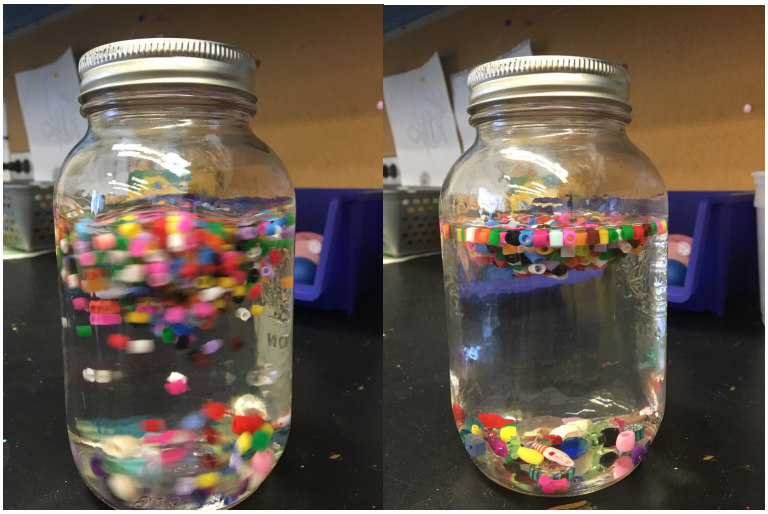

Figure 2. The Thoughts Jar activity helps to illustrate how mindfulness works. In this activity, participants are invited to share their thoughts and feelings by inserting various beads into the jar of water. The jar is shaken to represent a racing mind. Mindfulness is conceptualized when the beads begin to settle.

The experiential nature of the program fostered a more comprehensive understanding of mindfulness and its benefits. In the following example Holly expressed that experiencing the activities contributed to her developing a more profound understanding of mindfulness and its benefits:

> I enjoyed actually doing the activities as opposed to just reading about them because I've always intended to do mindful activities by myself. I even have a couple of apps on my phone that I've gone through the trouble of downloading and I haven't actually used them. So, this was a way for me to set aside my time on the Monday afternoon to actually do some of these activities. So now I have a lot more confidence in what these mindfulness activities might do for me and I might actually break open the apps now that these

> sessions are going to be over and actually use some of these techniques, mostly for myself, but also for those kids that I work with who might benefit from … (By) actually doing some of the activities and seeing what kind of effect it has on me personally. Therefore, having a better understanding of what mindfulness activities could do for people ... in general. Not just intellectually, but actually feeling it.

Likewise Karen indicated that the experiential methods employed in HAP led to a more comprehensive understanding of mindfulness. She indicated an increased emotional intelligence and a more concrete awareness of self as a result of her participation in HAP. She said:

> I found that I had more of an awareness of emotions and it brought a lot of, not just words but, -it was the experience of reflecting on those emotions and how they make you feel and having to physically somehow depict that. So, it brought more emotional awareness to myself and then I can take that back to my students and help them to understand their emotions as well … and give them maybe some words or some descriptions of how they might be feeling. And somehow doing it physically made it more concrete.

Many participants expressed that the playful nature of the HAP created an engaging and safe space for them to learn mindfulness. According to Huss and Sela-Amit (2018), the use of arts-based methods could be utilized more in social work and research allowing people of diverse backgrounds alternative methods of communication and expression. Angela spoke to the way in which the arts-based methods engaged her, while less familiar methods and more formal practices, such as mindful eating were challenging and less accessible to her. She stated:

> The reason I didn't like it [mindful eating] was cause I had no idea what I was doing and I felt uncomfortable...the art, that was my favourite thing ...I was like, ya, let's play. Gimme all those markers, gimme ...all that paint. You know...So that was my favourite part of it because I like that stuff and it - you want to do more of it and the things that you like.

The arts-based methods utilized in HAP helped create a safe and comfortable environment in which participants were more open to learning. The arts allow individuals symbolic and visual forms of expression in place of written or spoken language (Huss & Sela-Amit, 2018). Feelings Inventory, an art activity facilitated in HAP, is an example of how arts-based methods provide a creative outlet for individuals to express themselves. In Feelings Inventory participants are asked to list all of their feelings experienced throughout the day. Then they divide a page into parts depicted by size, colour, shape, and/or other symbols, which illustrate how much they felt each feeling. Figure 3 shows examples of participants' Feelings Inventory.

Figure 3. Feelings Inventory Activity

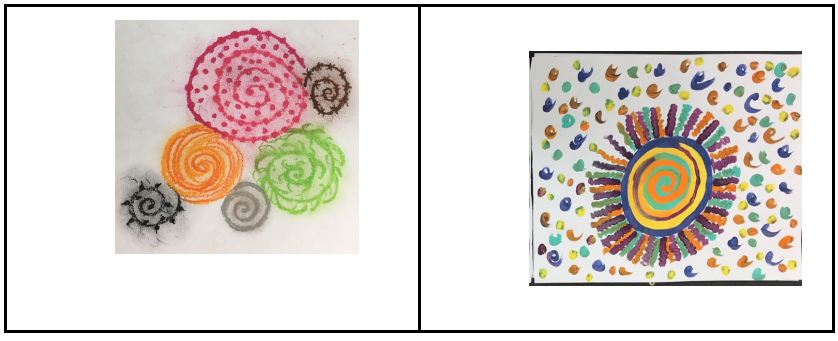

Figure 3. In Feelings Inventory participants are invited to create a visual representation of the feelings they had throughout the day allowing them to reflect on and express their feelings in a concrete way.

Previous research supports the use of arts-based methods as aids in increasing self-understanding and self-expression (Huss & Sela-Amit, 2018; McNiff, 2008). Elizabeth spoke to the playful nature of the arts-based methods reminding her of her younger self. She stated:

> So, I really enjoyed the collage...It sparked this memory of how much I really loved collaging for like 10 years of my life I was constantly cutting and saving things and making things out of it so it like brought back a little childhood like oh ya, this is friggin' fun…. those were my favourites...just the sense of like playing and having fun with it.

The following quote by Ryan speaks to how the arts-based methods utilized in HAP create a safe and fun environment in which participants may deepen their self-understanding and express themselves without judgment:

> If I were to describe this program to someone who doesn't know anything about it, I'd say that it's a non-judgmental community of people who gather to experience being playful and allow themselves that freedom to use that playfulness, but also touch upon some you know deeper introspective things that ... we often bottle up and either because of time, or societal restraints, or our own limitations, we don't often have a way … of expressing them.

The purposeful use of the group was also noted by the participants as a positive aspect of HAP. For instance, post-HAP, some participants expressed that they appreciated the opportunity to connect with other educators in a comfortable and relaxed atmosphere, acknowledging the value of the group in their learning mindfulness. They indicated that the group work approach created a sense of trust, fostered positive connections, and promoted a sense of normalcy.

The development of trust and ability of group members to be vulnerable and authentic were discussed by many group members. Sharon, for example, commented during the post-HAP interview that she felt the group experience was important and she felt safe to share her feelings freely within the group. In regard to the facilitation of the group, Sharon said, "I don't know if you'd have to be specifically a teacher, but just know how to set up a group situation where people would feel safe and welcome and comfortable." She also stated, "I felt very comfortable in this group and open to share our feelings."

Karen expressed that a sense of trust was built for her due to the closed group format when she said, "I liked that it was a closed group. I like that part of it; that it developed a sense of trust and openness as the sessions went on." Holly indicated that the trust built within the group allowed her to open up and share her feelings more freely. She stated, "I came to learn the value of being able to share things with, not strangers, but not necessarily with your spouse; just people outside your normal day to day conversations that you might have." Group work fosters interaction between group members and between individual members and group facilitators (Malekoff, 2015). The experiences each group member brings as well as the interactions between members, create a unique group environment supporting the participants' statements.

In Me as a Tree, an activity introduced early in HAP, participants are invited to represent themselves as a tree. See Appendix N for an overview of this activity. The Me as a Tree activity

allows participants to reflect on themselves and abstractly represent themselves in a non-threatening manner. Discussions surrounding differences and similarities amongst the trees allow participants to express themselves, learn about one another and foster group cohesion. Elizabeth commented that the group work helped her to share her thoughts and feelings and learn about other people. Elizabeth said the following about Me as a Tree: “I liked me as a tree ... I thought that was a nice connection with nature and the self... and everyone's was so different so that was really a nice way to kinda get to know each other at first”. Figure 4 shows the results of one groups’ Me as a Tree activity. Both groups shared that while the length of HAP was good, they would enjoy a HAP reunion in which they may reconnect with one another and discuss their personal mindfulness journeys, emphasizing the value of the group members. As Sharon said, “I'm kinda sad that it's over, cause it's that once a week - it's a nice opportunity to chat about some of the things that we've done and just how we've implemented the strategies”.

Figure 4. Me as a Tree Activity

Figure 4. In the Me as a Tree activity, participants are encouraged to represent themselves as a tree. Self-reflection, self-expression, and connection are discussed following this activity.

Participants expressed feelings of appreciation in response to the opportunity to connect with other educators in a comfortable and relaxed atmosphere, and acknowledged the value of the group in their learning of mindfulness. They reported feeling that the group promoted a positive learning environment in which to build connections with other educators, support one another, and learn about themselves and others. Coholic, Dano, Sindori, and Eys (2019) identified that a number of MBIs discuss the importance of a cohesive and safe environment in which to learn and practice mindfulness. Angela expressed how sharing her thoughts and feelings with others fostered the development of feeling connected to other group members. Angela said, "I like talking with other people and having shared experiences that was my favourite part...it's connecting so, I'm going to miss that part." Sibinga et al., (2014) also reported the group format utilized in their mindfulness study was described by participants as a positive experience in which to meet friends and learn new things.

The effects of the group and peer support is further supported by the following quote provided by Katie in her pre-group interview; "I'm already starting to feel better because I realize there are other people going through the same thing". Michelle also commented in her post-HAP interview that the group provided a sense of normalcy. She said:

> As well as in a... group - I just think that, it really got us to just learn more about new people and that we're not alone kinda thing. So, our struggles are kinda the same, so or similar I mean.

These results are congruent with previous social group work and MBI research. According to Preston-Shoot (2007), social group work promotes interconnection, change, and feelings of normalization.

Personal and Professional Benefits of Learning Mindfulness

This theme "personal and professional benefits of learning mindfulness" highlights the perceived benefits participants gained through their participation in HAP. Their new understanding of mindfulness, developed through the experiential arts-based methods of HAP, fostered increased self-awareness and acceptance, and offered educators an opportunity to explore the practice of mindfulness. Most exhibited an increased awareness of internal sensations and demonstrated understanding that recognizing, acknowledging and reflecting on emotions and sensations fostered better emotion regulation within themselves. HAP also provided participants an opportunity to foster personal growth by prioritizing and learning about themselves, and to connect with peers in a relaxed and playful manner.

First, some participants described how participating in HAP provided them with an opportunity for self-reflection leading to increased self-awareness and increased recognition of how mindful (or not) they are in their day to day life. In the following example, Sharon describes how through HAP she developed a deeper self-understanding:

> I learned some strategies that I can use for myself. Just... to bring some awareness to my own mindfulness. I thought I was a fairly mindful person, but I think this has definitely helped make me more aware of that [how mindful she is].

Ryan explained that one particular activity had a profound effect on him leading to a deep understanding of himself as an artist. The following quote is from his post-HAP interview, when Ryan described his perception of how he felt he had previously contributed to the appropriation of Indigenous culture and how HAP facilitated a change in his behaviour:

> Painting on a Line (an activity introduced early in HAP) actually changed how I do things as an artist. I'm transitioning between a colonizer's appropriation of Indigenous culture art work - a lot of my artwork was very Norval Morrisseau/Eastern Woodland style and I realize it's not my place. I shouldn't be doing that. So, I abandoned what I had been doing for years and [then I] didn't know where I was. I was kinda all nebulous because it's (Woodland style art) so - there's a formula and fine lines and blocks of colour, which I thought was my style of artwork. But I'm realizing now that [my art is] something much more organic and free flowing… since then [Painting on a Line] I've created multiple pieces in a very similar style, not hung from a line, but much more organic and phonetic and free-flowing.

Results of this activity are shown in Figure 1 above. Ryan's art is displayed on the furthest to the right.

According to Kabat-Zinn (2013), MBIs offer participants training in mindfulness, resulting in increased awareness of thoughts, feelings, sensations and experiences. Many HAP participants described how their increased self-awareness, developed through acknowledging their internal physical reactions to external stimuli, promoted more conscious, thoughtful responses to situations that arose in their personal and professional lives. Teachers noticed that they were less reactive and perhaps allowed themselves more time to respond to situations rather than habitually reacting. This is supported by Hayes and Feldman (2006) who described mindfulness as an emotional balance incorporating acceptance of internal experiences and the ability to regulate one's emotions. Likewise, Emerson and colleagues' (2017) findings indicate that individuals who practice mindfulness have been found to have increased emotion regulation.

The issue of improved emotion regulation is also supported by Sharon who describes an increased ability to respond rather than react to emotions in the following example:

> There's been some situations as we're going through this [HAP] where I could feel my heart rate getting up and my anxiety level getting up a little bit and it's just it's been a few things that Amanda's talked to us about and Miranda has talked to us about that ok - I can, kind of bring this back and calm down a little bit and just do some breathing before I respond to something, so, I think that specifically helped me.

Mary recognized that deeper self-awareness was cultivated through her participation in HAP and that her increased self-awareness helped with emotion regulation. She said:

> I did learn to acknowledge my internal feelings and like take a personal inventory more often and it kinda reaffirmed for me to make sure that I act and not react. So, stay calm and do the breathing where you know those kinda things.

Angela also expressed an increase in emotion regulation. She began by stating, "It's just a matter of being in touch with what you're feeling and the emotions or sensations around you and being in the present and just different ways to just find out how you really feel." Angela further described how her participation in HAP fostered her ability to recognize and regulate her emotions. She explained that a particularly stressful situation was unfolding prior to her coming to the post-group interview. Angela observed that pre-HAP she would have had the tendency to react without thinking. She described how participation in HAP taught her to deal with challenging situations more mindfully. Angela said:

> [J]ust before I got here I got a little nasty text and … (details removed for privacy) now everything is getting ugly and I didn't know … I was able to - I keep looking at my phone because it's bothering me, and I'm not responding to it ... But I usually would have...Not usually would have, I might have more tendency to respond [before coming to HAP] and I'm just like - ugh that's ugly and that's yours. And that might be because of this [HAP], it might be. You just take a moment and you step back and you go, no, I don't own that kinda hate, I would never think that of anyone.

Angela went on to explain that although it was difficult, she was able to choose her response, rather than react impulsively:

> I don't know what to do with that next, but so I'm glad, I'm glad I had somewhere just to come and put that away for a while… I had to really focus though. I was trying not to look at the phone. I was like you damn phone and you were talking and I was like damn phone. But, I think that's important that you know, I'm not going home and talking- I'm going to talk to my husband, [about it], but I'm not going to go and slander [others involved] ... I also having a chance to say, why am I running? I used to run to drama and look for it to feel alive and [now] I'm like... if I could sleep my whole life, I'd be content I think. No more drama.

The perceived benefits of increased emotion regulation are well described by Michelle who commented that mindfulness could help her regulate her emotions by becoming more responsive rather than reactive in daily life. She said the following about how mindfulness helped increase her emotion regulation, "It's really just taking the time to stop and think about

what you're doing, not just going on autopilot all the time." Increased emotion regulation was also experienced by other participants, including Mary, who perceived HAP as helpful in cultivating mindfulness concepts such as patience and acceptance. Mary said:

> I learned, and again maybe refreshed and just renewed, ...that things may not always go the way you want and then you can adapt it and go with the flow. If it doesn't work out, you know... it's a kind of like stay calm, it'll work out; no one needs to hyperventilate. So, it's like a skill of added patience. And you don't always have to push your goals onto the others. And ... it's okay that: let go of the control.

This theme "personal and professional benefits of learning mindfulness" describes how HAP provided participants the time and space to practice mindfulness, learn about themselves and prioritize themselves. Participants indicated that they understood the importance of setting aside time for themselves but self-judgment, fear of being judged by others and perhaps feelings of unworthiness, seemed to evoke feelings of guilt for doing so. Julie and Ryan, for example, stated that scheduling time for themselves was important, yet challenging and something they were not quite comfortable with. Ryan said the following about how HAP helped him: "I [am] echoing what a lot of people said [about] the importance of setting that time aside. And to not feel guilted by it, either our own self-guilt or the guilt that others might feel or might express." In this example Ryan expresses feelings of guilt and perhaps shame in taking time to attend to his own well-being. Likewise, in the following quote by Julie, she acknowledges that while it was challenging for her to do so, setting aside time for herself is necessary and valuable:

> I learned that ... it's hard to make space for something like HAP in your day, in your week, in ... your personal and ... professional life. But that … it's worth it to do

> something that's just uniquely for you as a person. I think in our profession we do so many things that are specific to PD or specific to students, or specific to a purpose. Like you have a meeting for a purpose. Where HAP was - you were the purpose, which was sort of weird.

Helping professionals, such as teachers are at an increased risk of burnout and compassion fatigue resulting from more attention given to the needs and well-being of their students than to themselves (Skovholt & Trotter-Mathison, 2016). Rothschild (2006) suggests that many helping professionals would benefit from mindfulness training in order to increase their self-awareness and attention given to their own needs. This theme describes participants' perceived benefits they gained through learning and applying mindfulness in their personal and professional lives.

Educational Consequences of Teachers Learning Mindfulness Through Arts-Based Methods

This theme describes the perceived widespread benefits of teacher participation in HAP. The personal and professional benefits attained by teachers, as described in theme three, contributed to indirect yet immediate benefits for students of the teachers who participated in HAP through an increase in teacher presence. The theme "educational consequences of teachers learning mindfulness through arts-based methods" also describes the impact on students of teachers learning mindfulness through arts-based methods as described by the teachers. Some participants offered insight into the feasibility of HAP for Rainbow District School Board (RDSB) staff and/or Ontario educators. While theme three discussed the personal and

professional benefits attained through their participation in HAP, this next theme examines potential benefits on other educators and students as described by the participants.

As previously described, teachers experienced a variety of personal benefits including greater self-awareness and self-acceptance, and an increased tendency to respond rather than react. Teachers who are self-aware, non-judgmental, mindful and present are better able to meet the demands of the classroom (Hahn & Weare, 2017; Jennings, 2015). These demands include responding to the diverse learning needs in the classroom and emotionally supporting their students. Becoming less reactive to stressors, cultivating a sense of gratitude and dealing with adverse situations in a calm manner fosters the development of positive relationships between teachers and students, and can also model a mindful way of being and positive stress management techniques for students (Jennings, 2015). Julie said that she recognized how the program benefited her directly, and that her participation in HAP also positively impacted those around her. She said:

> The arts program (HAP), [is] about learning about yourself. The activities primarily are for you to recognize things you believe about yourself, about your teaching practice, yourself personally...It's personal, but then ... the activities are also things that I've been able to share with my colleagues and my classroom and ... it starts with you, but then there's an outward reaching effect too.

Elizabeth pointed out the connection she saw between her level of self-judgment and her judgments of students. Letting go of some of the high expectations she placed on herself and her students allowed her to provide some opportunities to her students to just play and learn.

Learning mindfulness concepts fostered her ability to appreciate the moment and let things be as they are. She said:

> [I] noticed that there still is a lot of self-judgment. And if I'm doing that to myself, it's probably impacting what I'm looking at what my students are doing as well... Some activities are more criteria type activities and some activities- it's just like- appreciate these moments where kids are free to play and learn about themselves. And so, I will apply and I am applying it in my life as well as in my teaching. And just like today I was sort of saying I'm at the end of the day and ...I'm nervous... Why? What were my standards before? Did it not look like how I wanted it to look? So, it's like I can apply that same process of judgment then release it. And if I have to take 10 deep breaths in the middle of this class they do it with me, then I benefit at the same time.

Mary described how HAP helped her to develop a beginner's mind, curiosity and appreciation for her students, and how embodying mindfulness positively impacted the learning environment. Mary said:

> It (HAP) definitely benefited me personally to stay calm. Even when I go to work now, every day is a new day and I view my students like today is the first day again. And so, it's always a new day and we have a lighter mood and it's just to see individuality in everything and learn to appreciate everything for what it is and not try to make it fit in the mold.

Similarly, Julie described how HAP helped her develop a deeper sense of gratitude in her life. She explained:

> It's [mindfulness] about appreciation for me. And I think that's something that I've added to my definition of mindfulness since this program. Like you appreciate the people you're with, you appreciate their stories, what they have to say, You have time to appreciate the activity, to appreciate, you know the taste of the food or not necessarily connected to something that's part of your work day and so in the slowing down too, but that appreciation of any given moment in whatever way is what that means to me."

Teacher presence can be developed through the embodiment of mindfulness (Miller, 2007). Presence refers to a true sense of being with a person, a deep listening or understanding (Miller, 2018). Teacher presence describes authentic, attentive awareness of students and the environment and allows teachers to better deal with the changing needs of their students with patience and compassion in an open and receptive manner (Rodgers & Raider-Roth, 2006)

Participation in HAP encouraged the integration of mindfulness into their personal and professional lives, and had positive effects on the learning environment and thus for students. Additionally, teachers' capacity to teach mindfulness to their students also increased as they became more mindful themselves (Jennings, 2015). Participants described how learning mindfulness through arts-based experiential methods improved their capacity and willingness to bring mindfulness into their work with students. Some participants shared how they began to introduce activities after experiencing them in HAP. The following quote by Rachel is an example of how a participant's experience in HAP fostered the implementation of mindfulness

activities within the school. Rachel shared Painting on a Line activity with her students in an effort to demonstrate the concept of letting go. She explains:

> I really liked painting on a string (line) and implemented it immediately … [be]cause just that … relinquish of control and you have this perfect vision in your head of what you're going to create and then it does not end that way... I really like that one.

Rachel demonstrated an understanding of the relevance of this particular activity for teaching the mindfulness concepts of acceptance and letting go.

Angela described how she used the Dream Collage activity in her classroom as way to increase self-awareness and expression and how the activity offered participants an opportunity to learn and understand others. In Dream Collage participants are asked to cut out words, phrases or images from magazines that resonate with them. Then they are invited to arrange them on a piece of construction paper to create a dream collage. The collage can represent one or more dreams or a dream they have for their future. The group may offer input such as questions or comments in order to help the dreamer reflect on his/her dream collage, however, the interpretation of the dream collage is left up to the dreamer. Refer to Figure 5 for Dream Collage examples. In her post-group interview, Angela said:

> I did that [Dream Collage] right away, that very next week with my students, because I was like, this is so non-threatening. Don't have to draw, don't have to prepare, and you're ripping stuff and you're cutting stuff and you're making this massive mess and then it's yours... [The students] need[ed] to explain that [the art] because [there was] just so much on there... So, I think that was a fun one because I think everyone had an entry point... And it was fun to share and see how similar they were.

Figure 5. Dream Collage Activity

Figure 5. In Dream Collage participants are invited to represent a dream they have for themselves. This art activity encourages self-reflection and expression.

While some participants had not indicated implementing mindfulness activities in their classrooms by the end of the program, they described their intentions to do so as they began to better understand and embody the concepts associated with mindful living. Most showed an understanding that in order to cultivate mindfulness in schools, teachers must first embody mindfulness in their own lives. Specifically, when describing HAP, Rachel said, "It [HAP] helped me to better teach it [mindfulness], or better implement it with students and so I really liked that part - that it started with us and then it was a matter of taking it to students." Hahn and Weare (2017) support the concept of introducing mindfulness to students only once educators have at least begun practicing and integrating mindfulness into their own lives. As participants began to better understand the concepts, their confidence and capacity to teach mindfulness increased. For example, Sharon indicated that her self-awareness and personal practice of mindfulness increased through participation in HAP and she was better able to bring mindfulness activities to her students. Sharon said:

> I don't feel like I'm a person that gets stressed easily, but it (HAP) certainly helped me. There [have] been some situations as we're going through this (HAP) where I could feel my heart rate getting up and my anxiety level getting up a little bit and … a few things that Amanda's talked to us about and Miranda (RA2) has talked to us about that I can kind of bring this back and calm down a little bit and just do some breathing before I respond to something. So, I think that specifically helped me… There're specific activities that we did that I brought back to students. So, I had an opportunity to do it myself and then experience it as a teacher as well.

Additionally, Mary stated that as a more mindful person, she could also use mindfulness activities she personally benefited from with students. Mary said,

> I would say that it (HAP) is a great learning tool to help create awareness and to keep you in the moment and reduce a lot of anxiety and stress... You could just pick it up and do it right there and then. An example of that would be the breathing exercise we did following the figure eight or the eternity symbol where I've actually even used it with students and they love it.

In the following example, Rachel explained how her increased awareness allowed her to help her students with their emotional intelligence and expression:

> I found that I had more of an awareness of emotions and it brought a lot of, not just words, but it was the experience of reflecting on those emotions and how they make you feel and having to physically somehow depict that. So, it brought more emotional awareness to myself and then I can take that back to my students and help them to understand their emotions as well … And give them some words or some descriptions of how they might be feeling...somehow doing it physically made it more concrete.

Michelle and Elizabeth both commented that they would offer mindfulness to their students through the implementation of some of the arts-based experiential activities. Elizabeth indicated that the Thoughts Jar activity was challenging for her at the beginning of the program, as she seemed to overthink the activity. However, by the end she better understood how it could be used to teach the concept of mindfulness to her students. In her post-group interview Elizabeth said, "the bead jar I had trouble with at first, it was like how do I know which bead, and how many and they're all so different, but now I'm definitely going to try that in class." Michelle commented that HAP was beneficial to her learning mindfulness and would aid in her teaching practice. She said:

> I would really recommend it to other teachers. Honestly, I think all the activities- I... truly wish there was a little bit more guidance in school for how to implement activities and stuff like that so this really would help me with my art program, plus getting to know kids a little bit more.

The idea that many participants found the mindfulness activities meaningful and began to offer some activities to their students shortly after experiencing them is congruent with the experiences described by Hahn and Weare (2017) who stated that when teachers practice mindfulness in their own lives, they are not only more capable of, but also more enthusiastic to offer mindfulness to their students.

Some participants identified that the benefits they and their students attained through their own participation in HAP may be applicable for other educators and their students. They expressed that the tools and capacity for cultivating mindfulness within their own lives and those

of their students may benefit others as well. Holly acknowledged that mental health and wellness were becoming increasingly more important and prominent within education. She described how the non-threatening nature of HAP activities, such as Thoughts Jar enables people to authentically engage in otherwise challenging situations. Holly said:

> I would definitely recommend it (HAP) to other adults. And we're trying to incorporate a lot more mental health emphasis in the building because we realized there's so many kids walking around with depression and anxiety etcetera. So, it's huge to get people more aware with that … And it was funny because when we were doing the passing the beads [Thoughts Jar] at the staff meeting, there was one staff member who's been very reluctant to participate fully in all the mental health stuff seeing it as a waste of time... And she was saying ... I don't know why I'm putting beads in here, everything's fine, nothing's wrong, everything's fine. You know so then she passed it along dutifully, and then she said, 'Oh wait a minute, gimme the jar back. Pulled it back and said and I got so and so in my class.' It was a great moment when she could say more than everything's fine ...what am I putting these beads in here for? Because... she wasn't opening up and then she was ... pouring a whole bunch in because she's got so and so in her class - It was a big challenge for her … That was a breakthrough moment right there for me to watch that happen. That was awesome.

In the following example, Sharon describes how she thought HAP could help all educators with managing their own stress, and also in supporting students:

> It's a great learning opportunity and I think it's something that all teachers should participate in. It's a great opportunity to learn a little bit more about mindfulness and

> because our jobs can be a little stressful, like we're making decisions constantly and it just sort of helps to bring awareness and a sense of calm too. And ... certainly the aspect that as teachers we do like to bring whatever we learn to our students and our students need this. Big time. And it's been really nice to be able to take what we're learning and apply it to our job and to our everyday life as teachers. So, I think it should be a part of the curriculum when you're teaching teachers.

Others, including Karen and Ryan recommended offering HAP in a more intensive training session such as a one-day professional activity (PA day) or a weekend retreat. Karen stated:

> I would definitely recommend it [HAP]. I would even recommend it [HAP] as a PD workshop if the people could pick … just [to] be mindful and just [to] reflect and I think we all would benefit from just pausing and learning to be a little mindful and we'd all benefit from it.

Likewise, Ryan said, "I would definitely recommend it. I would definitely like to see this as something that is offered on a regular basis for staff, but I think it would be exceptionally powerful as a weekend retreat."

Overall, participants recognized the student benefits of their participation in HAP as they described how the change in their own mindfulness influenced their teaching practices and ability to be present for and accepting of their students. They commented that the arts-based experiential methods utilized in HAP provided concrete, relevant activities from which they could draw from in order to bring mindfulness concepts to their students. Finally, participants

expressed that further HAP training would be beneficial to other educators in various workshop or professional development activities.

Summary

In this chapter, I discussed the findings from this mixed methods study exploring the feasibility of an arts-based mindfulness group program for teachers. I discussed the quantitative and qualitative data analysis and defined the four themes that were generated from the qualitative data analysis. These were: (1) more accurate and comprehensive understanding of mindfulness; (2) participants' experiences learning mindfulness through experiential arts-based group work; (3) personal and professional benefits of learning mindfulness; and (4) educational consequences of teachers learning mindfulness through arts-based methods. Furthermore, to add clarity and ensure validity of the themes, examples illustrating participants' experiences as well as photographs of their artwork were incorporated throughout the chapter. I aimed to provide a clear description of the findings of this study. Namely that participation in HAP fostered greater self-awareness and mindfulness, and that teachers reported feeling less stressed and better able to manage daily stressors. The quantitative measures were in line with the qualitative analysis and supported the use of HAP in decreasing teacher stress and increasing mindfulness. In the next chapter, these findings will be discussed in greater detail along with the implications and limitations of this study, and recommendations for future research.

Chapter Four

Conclusion

This final chapter begins with a summary of the study including a reiteration of the purpose. The main findings follow along with the implications of these findings for teachers' well-being and their professional practices. I then discuss some limitations of the study and offer recommendations for future research and applications.

Review of the Study

I explored the benefits, effectiveness, and feasibility of a holistic arts-based mindfulness group program for decreasing teacher stress. I aimed to add to the current body of knowledge regarding the use of MBIs in education, specifically in regards to teachers' mindfulness and stress. In the current study, I analyzed quantitative and qualitative data from teachers regarding their stress, level of mindfulness, and experiences in HAP.

The literature review demonstrated that mindfulness and MBIs are becoming more popular and acceptable as stress reduction methods amongst teachers. MBIs have been developed specifically for increasing teachers' capacity to manage their stress. Researchers have also suggested that teachers who have participated in mindfulness training are more adept to teach mindfulness skills and/or concepts to their students. However, research investigating the benefits of delivering the holistic arts-based mindfulness program (HAP) to teachers was not yet conducted when I began my project. Thus, significant gaps remained in understanding how participation in an arts-based mindfulness-based intervention effected teachers' reported stress levels, mindfulness, and teaching practices.

On the basis of these gaps, I investigated the experiences of teachers who had participated in HAP. Four themes were constructed from the qualitative data collected pre- and post-HAP regarding participants' experiences. Quantitative data was also collected pre- and post-HAP through two introspective measures; the Five Facet Mindfulness Questionnaire (FFMQ), and Teacher Stress Inventory (TSI). This discussion will explore the relationships between the four main themes and results of the quantitative measures relative to the current literature and the research questions. The implications and limitations of this study will be shared and recommendations for future research and application will be discussed.

Rationale for the Study

When I started this research, I was looking to examine the experiences of teachers participating in an arts-based mindfulness program. My own experiences in the field of education taught me that there were high expectations on teachers to not only teach the curriculum, but also to support students in a variety of other ways, such as helping them develop adaptive coping strategies and promoting positive mental health amongst students. I also recognized that many teachers were struggling with managing their own stress. Some MBIs have been developed specifically for, and delivered to, teachers while others have been adapted from adult MBIs for use with students. HAP is unique in that it was developed from research with the specific needs of at-risk children and youth in mind, and it uses arts-based methods to teach mindfulness-based practices and concepts. The experiential arts-based methods used in this emerging mindfulness program makes many of the activities transferable to a school or classroom as demonstrated in my study. My research also showed that HAP is beneficial and effective for reducing teachers' reported stress and increasing their understanding and level of mindfulness. The personal and professional benefits of participation in HAP were emphasized by the educator participants.

Main Findings/Discussion

The study's outcomes will be discussed by reviewing the research questions and their associated findings. This research aimed to explore two main questions: (1) How does participating in HAP effect teachers' stress, level of mindfulness, and teaching practices? and (2) What are teachers' experiences in HAP?

To begin, participation in HAP fostered greater self-awareness, an increased level of mindfulness in daily life, and a more comprehensive understanding of mindfulness amongst participants. The reported post-HAP stress levels in this study align with previous research indicating that mindfulness training and mindfulness practice reduce stress. Additionally, teachers who are more mindful and less stressed are better able to relate to their students and respond to their needs (Hahn & Weare, 2017). Participants in this study reported professional gains related to being able to offer mindfulness to their students, however, as mindful, less stressed teachers their impact may be even greater than the self-reports suggest.

The pre- and post-HAP interviews revealed four common themes amongst the participants regarding their experiences in HAP, their mindfulness knowledge and practice, their reported view of stress, and their teaching practice. The themes generated were: (1) more accurate and comprehensive understanding of mindfulness, (2) participants' experiences learning mindfulness through experiential arts-based group work, (3) personal and professional benefits of learning mindfulness, and (4) educational consequences of teachers learning mindfulness through arts-based methods. The self-reported measures converged with the qualitative analysis conducted and indicated a change in both mindfulness and stress. The Teacher Stress Inventory results indicated a statistically significant decrease in participants' reported stress. The raw data

collected from the Five Facet Mindfulness Questionnaire showed a slight increase in mindfulness pre- and post-HAP; the difference was not of statistical significance.

In order to make clear connections between the data analysis and the research goals, I will dissect one of the initial research questions. The question "How does participating in HAP effect teachers' stress, level of mindfulness, and teaching practices?" can be addressed by thinking through three related questions. The experiences of teachers in HAP will be revealed through the discussion of the following three questions (1) "How does participating in HAP effect teachers' level of mindfulness?" (2) "How does participating in HAP effect teachers' stress" and (3) "How does participating in HAP effect teachers' teaching practice?"

How Does Participating in HAP Effect Teachers' Level of Mindfulness?

In the current study, teachers indicated an increase in their understanding of, and personal practice of, mindfulness. First, the Five Facet Mindfulness Questionnaire administered pre- and post-HAP demonstrated that participants experienced an increase in mindfulness by the end of the program. Likewise, the qualitative data collected through the pre- and post-HAP interviews reveal this change. Specifically, the themes (1) more accurate and comprehensive understanding of mindfulness and (2) personal and professional benefits of learning mindfulness, constructed from the interviews speak to these changes reported by the participants of HAP.

Before participating in HAP, the knowledge of, and experience with, mindfulness of the teachers in this study was limited. Prior to HAP most participants demonstrated a limited understanding that mindfulness required awareness of the present moment experience, and that perhaps more mindful individuals exhibited greater emotion regulation. However, the attitudinal foundations of mindfulness were not discussed by most participants pre-HAP and a few participants held misconceptions. Only one participant discussed the mindfulness-based concepts

of non-judgment and letting go, and only briefly. Tina shared that in one of the mindfulness courses she took, they "talked a lot about being mindful, being in the moment, [and] not [forgetting that] even when the thoughts come in [not to be] angry with yourself." She said she was taught to "acknowledge what's there and … then let that go." Some participants described components of growth mindset in their definition of mindfulness pre-HAP. For example, in Angela's definition of mindfulness, she alluded to mindfulness as simply being a mindset. She said, "we use it [mindfulness] in the class … where we always put the word yet at the end of the sentence… keeping it positive."

Wong and colleagues (2018) proposed that without mindfulness training individuals may respond to questions used in evaluating mindfulness inaccurately. Thus, it is possible that a lack of thorough understanding of mindfulness concepts by participants contributed to inaccurate responses on the FFMQ pre-HAP and changes in one's mindfulness may be more significant than the measures show.

The mixed-methods approach utilized in this study included qualitative group interviews along with the quantitative measures. This approach helped create a more thorough understanding of the effects of HAP on teachers' mindfulness. Post-HAP interviews revealed that teachers developed a deeper, more comprehensive understanding of, and personal practice of, mindfulness. After participating in HAP, teachers included mindfulness-based concepts beyond present moment awareness in their descriptions/definitions of mindfulness. Self-awareness, compassion, non-judgment, acceptance, letting go, and non-striving were some of the mindfulness concepts discussed in the post-HAP interviews. The theme "more accurate and comprehensive understanding of mindfulness" described these changes in greater detail. Along with a greater understanding of the concepts of mindfulness, post-HAP interviews revealed the

ways in which participants incorporated a more mindful attitude in their daily lives. Following participation in HAP some teachers reported being more aware of their internal and external sensations, and expressed a greater sense of gratitude. Experiencing and expressing gratitude is significantly important when cultivating daily mindfulness and can increase one's level of happiness (Froh, Kashdan, Ozimkowski, & Miller, 2009). Gratitude also allows us to acknowledge the positive aspects of our lives by drawing attention to the present moment. Gratitude is also believed to lead to increased self-awareness (Emmons & McCullough, 2003). As more grateful and more mindful individuals, teachers better understand themselves, their feelings, judgments, perceptions, and habits and better express empathy and compassion (Hahn & Weare, 2017). Mindfulness brings presence, acceptance, clarity, calmness and happiness to our lives (Hahn & Weare, 2017). Learning and practicing mindfulness through participation in HAP generated benefits as outlined by teachers in the theme, "personal and professional benefits of learning mindfulness,". Many participants also noted better emotion regulation within themselves. As a result of participating in HAP, participants expressed greater self-awareness and self-compassion, a more comprehensive understanding of mindfulness, and increased informal mindfulness practice in their lives. The pre-and post-HAP interviews along with the pre-post changes on the FFMQ support the utility of HAP to increase mindfulness amongst teachers.

In a review of studies involving two popular MBIs, Gu, Strauss, Bond, and Cavanagh (2015), identified self-awareness, body awareness, and emotion regulation as mechanisms underlying mindfulness. Increased self-awareness and mindfulness skills leads to the cultivation of the attitudinal foundations of mindfulness such as non-reactivity, acceptance, and patience leading to further positive outcomes (Gu et al., 2015). Hahn and Weare (2017) argued that more

mindful teachers are better able to relate to and respond to the needs of their students. Teachers who experience and express gratitude towards their students can strengthen their relationship by treating the student with more kindness, thereby creating feelings of appreciation within the student (Ma, Tunney, & Ferguson, 2017). Thus, it is plausible that increased self-awareness, gratitude and cultivation of mindfulness amongst teachers in my study, led to more thoughtful, compassionate, and non-judgmental responses, which in turn led to more positive interactions with students, staff, and administrators. My research suggests that participation in HAP increases teachers' mindfulness, thereby allowing them to demonstrate patience, acceptance, and nonjudgment; to better understand themselves; and to regulate their emotions, thus contributing to a positive school climate.

How Does Participating in HAP Effect Teachers' Stress?

Participation in HAP appears to have had a positive effect on teachers' well-being through increased mindfulness, as discussed above, which appears to have contributed to the reduction of overall stress as reported on the Teacher Stress Inventory and in the development of positive coping strategies as revealed in the post-group interviews. The cultivation of mindfulness in their personal and professional lives may have played a significant role in teachers' relationship with stress post-HAP. The arts-based methods employed in HAP along with the purposeful use of the group also appears to have contributed to decreased stress expressed by participants post-HAP.

As more mindful individuals, teachers who participated in HAP developed a different relationship with stress. Teachers reported that learning mindfulness taught emotion regulation, helped cultivate self-compassion, and reduced their self-judgments and their judgments of others. In a systematic review of literature surrounding MBIs with teachers, Emerson et al., (2017)

reported that teacher participation in MBIs can increase the use of effective emotion regulation strategies which may in turn lead to reduced stress levels. It was evident that for some participants, the relationship between learning and practicing mindfulness led to increased emotional awareness and regulation, and thus feeling less reactive to stressors. For example, Ryan described mindfulness as a way to help develop non-reactivity within yourself by viewing situations more neutrally. Ryan said, "Mindfulness is part of a journey of being aware of who you are at the moment; and giving yourself the tools to kind of step out of yourself, and step out of the situation, and step out of the stressors, [in order] to decompress to find your bearings. So that you can successfully navigate whatever issues are coming up." Others also expressed how learning mindfulness through participation in HAP helped them feel less stressed in their daily lives. In the following example, Sharon suggests that her self-awareness increased through participation in HAP allowing her to better cope with stress. Sharon said, "It's [HAP is] a great opportunity to learn a little bit more about mindfulness… Because our jobs can be a little stressful, we're making decisions constantly, it [mindfulness] just sort of helps to bring awareness and a sense of calm too.

Pre-HAP, participants identified time management, existing mental health issues, and an insufficient amount of quality sleep as contributing factors impacting their level of stress. Work-related stressors such as responding to the emotional needs of their students, meeting students' academic needs, student behaviours, violence in schools, unhealthy relationships with administration, feelings of inadequacy, and compassion fatigue were also noted as sources of stress amongst the participants pre-HAP. Participants reported remaining in the same teaching role, in the same school, and thus it can be assumed that they were dealing with very similar work-related stressors as they had described pre-HAP. More mindful individuals have an

increased capacity to understand the behaviours of others, to respond to situations thoughtfully by regulating their own emotions, and promote resilience within themselves (Jennings, 2015). The theme "personal and professional benefits of learning mindfulness" described these benefits in greater detail. In this theme, teachers spoke to their increased emotional awareness and increased capacity to respond to challenging situations rather than react. They described how post-HAP they were better able to regulate their emotions and respond to stressful situations more mindfully than they were pre-HAP. In the post-HAP interview, Elizabeth said the following about how learning mindfulness through participation in HAP contributed to increased emotion regulation; "I think the first step for me is quiet, calm, slowing down, and then being able to separate from being in emotions and in moments unconsciously … to separating and observing yourself and things outside of yourself in a very non-judgmental way. So, part of that would be like not reacting to emotions … Rather than letting it (emotions) take over, [allow] gentle awareness, different senses and experiences." Participants' increased mindfulness, cultivated through participation in HAP, allowed them to better respond to stress by providing them with tools to understand and regulate their emotions. These results are supported within the literature surrounding the effects of MBIs. Previous research studying MBIs have shown improvements in the overall mental health of participants such as increased emotion regulation, affect tolerance, acceptance, and self-compassion (Davis & Hayes, 2011). The effectiveness of MBIs for decreasing stress, anxiety, worry, tension and depression within various populations have also been reported (Evans et al., 2008; Flook et al., 2013; Williams & Kabat-Zinn, 2011).

The playful and relaxed nature of the arts-based methods utilized and the group work format of HAP created a fun, safe, and welcoming environment in which teachers were able to engage in calming and enjoyable activities. The theme "participants' experiences learning

mindfulness through experiential arts-based group work" described how the arts-based methods and group work components utilized in HAP supported their learning of mindfulness. Furthermore, many participants described how participating in the arts-based methods and the sense of belonging fostered in HAP also brought about a sense of calm. McNiff (2008) encourages the use of arts-based methods for providing a nonjudgmental environment in which individuals can express themselves. Angela shared how the act of engaging in the art itself helped her to manage a stressful situation in her personal life. She said, "I hadn't made a collage in forever and it was on a day where I had just had gone through this huge transformation in my mind...My mind was reeling that week and it (collaging) just allowed me to let go of that for a little while… I was still thinking about it, but in a way that was still positive [I] got [to] focus too that was good." Likewise, upon hearing Holly describe how she enjoyed the texture of the sand, Karen commented, "How much happier would staff be if we put sand ... at our staff meetings? … Everyone would be happier."

Learning and practicing mindfulness and engaging in enjoyable arts-based activities appears to have had a positive effect on teacher's well-being. The post-HAP interviews as well as the TSI inventory support the utilization of this program for reducing teachers' reported stress.

How Does Participating in HAP Effect Teachers' Teaching Practices?

Teachers' participation in HAP appears to have contributed to some changes in teaching practices and/or teacher presence. The theme "educational consequences of teachers learning mindfulness through arts-based methods" described teachers' perceptions of the impact on students of teachers learning mindfulness through arts-based methods. They described how cultivating mindfulness in their lives allowed them to better respond to the needs of the class and fosters a positive classroom environment.

In the following example, Angela explains how her participation in HAP affected her presence within her class and interactions with her students. Angela describes how mindfulness helps her stay calm by letting go of control and being less reactive. In her post-HAP interview she said, "this (mindfulness) is more of a life skill for my personal life. And it also helps my students when I am centered and I feel like I'm at peace...Whatever you're doing over there, go ahead. I'm in my Zen spot so whatever...If I can do that more for me, I can model that for them...I'd like to say that (mindfulness) has just become a part of me." Similarly, Julie stated that learning mindfulness through HAP helped her realize that taking care of her personal needs and stressors makes her a better teacher. She said, "You (teachers) work in a profession where it's always about other people...so I think that I learned that putting myself into that equation specifically is not only appropriate, it's something I should work on… I think it makes me a better teacher and a more aware person, and [better at] trying to deal with your (my) daily stressors and things." Research in this field also suggests that teacher participation in MBIs contributes to positive classroom environments through their embodiment of mindfulness concepts such as nonreactivity, nonjudgment, patience, and open curiosity (Hahn & Weare, 2017; Jennings, 2015; Meiklejohn et al., 2012; Poulin, 2009). Additionally, teachers who practice mindfulness are much better equipped to offer mindfulness training to their students than those who do not (Weare, 2014).

Participants also described how the arts-based experiential methods employed in HAP provided them with mindfulness activities they could personally benefit from and also use with their students. According to Hahn and Weare (2017), as teachers begin to cultivate mindfulness in their own lives, they become more competent and excited to teach mindfulness skills and concepts to their students. The arts-based methods utilized in HAP provided teachers with

translatable activities they could bring to their students. For example, Rachel commented in the post-HAP interview that participating in HAP provided her an accessible way of implementing mindfulness with her students. Rachel said:

> I think that the arts-based [methods used in the] holistic arts-based program allow you to use different methods and styles of learning. And so, for myself in doing the activities, it helped me to better teach it, or better implement it with students. I really liked that part; that it started with us and then it was a matter of taking it to students.

Likewise, Michelle indicated that she saw the potential of the implementing HAP activities in the classroom or within a school setting. In the post-HAP interview Michelle said:

> I could totally see using every one of the activities in a regular classroom setting in the future... It would ... be interesting to see a group of kids with … similar struggles... come together and do these art activities. See ... what kind of progress you could make with them and the changes to their own personal lives.

Previous research outlines the importance of teachers learning mindfulness in order to effectively offer it to students. However, most MBIs currently being delivered to students are modeled on adult programs such as MBSR and MBCT. HAP was developed with the unique needs of children and youth in mind; the arts-based approach promotes engagement, making learning mindfulness skills and concepts accessible. My research highlights the feasibility of utilizing experiential, arts-based activities when offering mindfulness training to teachers. HAP appears to offer teachers mindfulness training, while increasing their capacity to bring mindfulness to their students through translatable activities. Previous research supports teachers learning mindfulness in order to increase teacher presence and improve the learning environment for students (Hahn & Weare, 2017; Jennings, 2015). Teachers who embody mindfulness report a

greater sense of calmness and life satisfaction, and show more compassion, empathy and tolerance for others (Hahn & Weare, 2017). Mindful less stressed teachers are better able to meet the demands of the classroom (Jennings, 2015). Teachers' participation in HAP contributed to increased emotion regulation, acceptance, and nonjudgmental attitudes amongst teachers. These qualities are especially important in today's society which requires teachers to be more attuned and responsive to the emotional needs of their students (Napoli, 2004). Increasingly, schools are becoming more responsible for the promotion of positive student mental health (Ministry of Education, 2014). Overall student wellness can be supported through the promotion of positive student-teacher relationships and the cultivation of teacher presence.

Teacher participation in this MBI cultivated mindfulness within their lives. Teachers reported decreased stress, increased emotion regulation, and personal and professional benefits. Participation in HAP appears to have had positive effects on the classroom environment through increased teacher presence and capacity to bring mindfulness to students through the use of arts-based experiential methods.

Implications of the Study

Having previously been on a stress-related leave of absence from teaching (due primarily to work-life imbalance and the overwhelming sense of being unable to meet the needs of my students), I began my graduate work hoping to explore strategies that may be useful in supporting students facing challenges with schooling. My own experiences working as a teacher taught me that the social, behavioural, and mental health challenges students were facing had a huge impact on my ability to perform my instructional role. This research confirmed that my experience was not unique and many participants in this study felt overwhelmed with trying to meet the demands of the classroom and maintain a work-life balance. While the personal and

professional challenges identified pre-HAP had not changed drastically, teachers who participated in this study agreed that their participation in HAP helped them better cope with their daily challenges while increasing their capacity to offer mindfulness practices to their students. The implications of this study are widespread particularly within education. First, participation in HAP increased teachers' understanding of, and capacity to, embody mindfulness in their lives. Mindful teachers are better equipped to offer mindfulness to their students (Hahn & Weare, 2017). Participation in HAP provided teachers with appropriate and accessible mindfulness activities in order to do so and has led to the delivery of arts-based mindfulness activities to various groups of students within the Rainbow District School Board. Furthermore, this study has led to the creation of professional development opportunities for teachers within Ontario.

Teachers who practice mindfulness experience better overall health and wellness than those who are not mindful (Hahn & Weare, 2017). The effects of a mindful teacher on the classroom is two-fold (Meiklejohn et al., 2012). For one, mindfulness increases a teacher's ability to foster positive relationships by being better able to relate to, understand, and support their students. Second, less stressed and more mindful teachers can better respond to the needs of their students thus decreasing student misbehaviour and further fostering a positive learning environment (Meiklejohn et al., 2012; Smith & Jelen, 2016). This study has affirmed the need for effective and feasible mindfulness-based interventions for teachers within RDSB. Participants in this study revealed how HAP increased their understanding and practice of mindfulness thereby increasing their teacher presence. Some teachers who participated in this study stated that HAP made them better able to manage the demands of the classroom and promoted a sense of calm within their classes.

In addition to teaching mindfulness skills and concepts, HAP also provides teachers with a variety of experiential arts-based activities which they can use within the school setting. In my role as a classroom teacher, I immediately saw the usefulness of HAP activities with my students and began implementing them early in my HAP training. Similarly, many teachers in this study indicated that they had begun incorporating some mindfulness activities with their students, while some others had commented that they saw the feasibility of doing so. HAP is currently being delivered to students in some RDSB schools. For instance, my role as a Student Success Teacher provided me with a unique opportunity to offer HAP to four groups of intermediate students. Modifications are being made to the structure of the program to better accommodate the structure of the school day. For example, HAP was delivered to two groups of students throughout term one in one-hour sessions. Two new groups of students were selected for term two. In addition to the groups at my school, HAP is being delivered by social work graduate students in some elementary and high school classes within RDSB. Research reviewing mindfulness training with K-12 students supports the integration of mindfulness in education. Jensen (2016) posits that student learning and development can be directly and profoundly impacted by their stress. Meiklejohn et al., (2012) reported that student participation in MBIs fosters the development of emotion regulation, increases focus and helps mitigate some of the negative effects of stress. Facilitators of MBIs must embody the practices they are delivering. Thus, it is important that teachers offering mindfulness training to students engage in mindfulness training and practices themselves (Batchelor, 2012; Segal, Williams, & Teasdale, 2012). It is not unreasonable to assume that teacher training and participation in HAP supports the implementation of mindfulness training for students, contributing to improvements in student wellbeing and student achievement.

Furthermore, this study has affirmed the need for inexpensive mindfulness related professional development opportunities for teachers in Ontario. Some teachers who participated in this study said that they thought HAP was an effective way in which to offer mindfulness training to teachers. Some, including Ryan, suggested weekend courses might provide other teachers who are interested in learning and teaching mindfulness a unique and engaging way to do so. Ryan said, "I think it would be exceptionally powerful as a weekend retreat." Drawing upon the strengths and knowledge of its members, the ETFO calls upon teachers to share their expertise with other members across the province, offering a plethora of professional development opportunities for teachers for a small fee. The feedback provided by some teachers who participated in HAP led to the development of a three-day Mindfulness in Education professional development course, delivered in London, Ontario in July of 2018. This three-day course offered teachers an opportunity to learn and practice mindfulness, as well as learn about HAP through engaging in a number of the arts-based experiential activities. The feedback from this course was positive and supports of the findings from this research project. Many teachers who participated in the three-day training commented that they felt the course supported their personal and professional development while offering hands-on and engaging activities which are easily transferable to the class. They also thought ongoing mindfulness training for teachers in their schools or cities would be beneficial. Thus, I plan to refine the Mindfulness in Education course and will be offering mindfulness training utilizing the arts-based experiential methods and activities described in HAP to other ETFO teachers in Kitchener in July 2019.

Some teachers who participated in HAP indicated arts-based mindfulness professional development workshops for teachers would be beneficial within education. For example, Karen said, "I would even recommend it (HAP) as a PD workshop... It would be a great workshop if

people (teachers) could pick [to do an arts-based mindfulness workshop] and just be mindful... I think we all would benefit from just pausing and learning to be a little mindful." Additionally, since implementing HAP with teachers for the purpose of this study, I have conducted a 40-minute workshop at the University of Toronto's Ontario Institute for Studies in Education's Arts for Education Conference, offering teacher education students an opportunity to learn about and engage in two of the arts-based experiential methods utilized in HAP.

The results of this study confirmed the suitability and feasibility of offering an arts-based mindfulness program to practicing teachers. The arts-based methods employed in HAP made learning and practicing mindfulness fun, while offering teachers translatable mindfulness activities to bring to their students. Thus, there were both personal and professional benefits. Teachers reported feeling better equipped to deal with stressors in their personal and professional lives after participating in HAP contributing to the suitability of HAP with teachers. Furthermore, participation in HAP led to increased mindfulness amongst teachers, and direct and indirect benefits for students were identified as a result of this study adding to the program's suitability. HAP was offered for free, after school, and teachers were provided a light snack. These factors may have contributed to the low attrition rates and high attendance making HAP a feasible method of teaching mindfulness to teachers. Additionally, the training I have offered and will continue to offer for Ontario teachers through the Elementary Teachers' Federation of Ontario utilizing arts-based methods, further supports the suitability and feasibility of this emerging MBI with teachers.

Limitations and Recommendations

Limited resources and time restrictions of a master's thesis contributed to the limitations associated with this study. These limitations included small sample size, selection bias, the self-

reported measures used as well as timing and scheduling constraints. The small sample size (n=11) limits the power and generalizability of some aspects of this study. When a sample size is too small the power of the study reduces. Although the sample size was sufficient to report a significant change in stress on the Teacher Stress Inventory, the results from the mindfulness measure in this study yielded a power value greater than 0.05, indicative of low statistical power. Thus, it is challenging to draw accurate conclusions about the effects of HAP on teachers' level of mindfulness based solely on the results from FFMQ. The small sample size also reduces the generalizability of the results from this study.

Another potential limitation is selection bias. Teachers, the identified population, were primarily recruited through RDSB's email system. Individuals who participated in the program indicated during the pre-HAP interview that they had a keen interest in developing mindfulness skills in order to improve coping skills and better manage their personal and work-related stressors. They hoped to also learn strategies for teaching mindfulness concepts to their students. Teachers not accessing the classified ads folder on the RDSB email system or those working for another school board within the study's catchment area would not have accessed the recruitment poster. Teachers off work on sick or personal leaves may not have been accessing their email. Additionally, teachers experiencing high levels or work-related stress and/or those on leaves from teaching may have felt uncomfortable attending workshops or programs offered within the school setting. Furthermore, as previously mentioned, two non-teacher RDSB employees (one social worker and one educational assistant) participated in the study. Although their personal and professional stressors appeared similar to the teachers, their professional experiences and role within RDSB may have led to skewed results on the Teacher Stress Inventory. Thus, the sample is not representative of all teachers or exclusively teachers in the study's catchment area.

Commitment to the research was required during an especially busy time of the school year. Scheduling of the groups was limited to educators' and researcher's availability and thus ran weekly after school. Prior commitments and familial obligations may also have contributed to teachers' access to the program. The commitment required for participation, as well as the timing and scheduling of HAP may have reduced access to the program for some otherwise interested teachers. Future research may consider varying the recruitment method to include efforts aimed at offering the program to teachers seeking services and/or strategies for stress management. Recruitment posters at the ETFO Rainbow Local office, other teachers' unions offices, school staff rooms, and/or school boards' Human Resource offices may increase the awareness of the program to beyond those teachers accessing the RDSB email system. Finally, the interest in HAP from non-teacher employees may indicate a need to address the stress management of other groups within education to include all employees.

Future research may consider the use of a control group in an effort to strengthen the results of the analysis including the self-reported measures as the use of such measures may be considered a limitation. Self-reported measures are commonly used to measure human behaviour, however, it is important to also recognize the impact of factors such as social desirability, experimenter demand, knowledge of the concepts being measured, response bias, introspective ability, and honesty of participants (Hoskin, 2012; Wong et al., 2018). Future studies may also consider providing participants with a thorough definition of mindfulness prior to completing the pre-HAP mindfulness measure in an effort to illicit more accurate results on the FFMQ. Although the findings from this study supported the delivery of HAP to educators for decreasing stress, increasing mindfulness, and providing strategies for use with students, further research may strengthen and/or help us to better understand the findings. Larger sample sizes, a

control group, and variable start times could be explored in future research.

Based on the results of this research study, the following recommendations can be made within education and for the delivery of HAP: (1) conduct research examining the benefits of the Holistic Arts-Based Program in education with a larger population; (2) promote arts-based experiential methods as appropriate and accessible ways of offering mindfulness to teachers and students; (3) modify the program delivery and timing of HAP for teachers; and (4) deliver HAP to teachers and students concurrently. I hope that this research will be useful in highlighting the value of implementing HAP within education.

(1) **Conduct research examining the feasibility of Holistic Arts-Based Program in education with a larger population**

Future research with a larger sample size of teachers may provide a more comprehensive understanding of the feasibility of HAP within education and perhaps a broader perspective of its effectiveness. The results of this study suggest that HAP is beneficial for reducing teacher stress and increasing mindfulness. The arts-based experiential methods utilized in HAP were viewed by teachers as educational and enjoyable. Additional research exploring the delivery of HAP to teachers may support these findings and might provide further insight into possible program adjustments or modifications.

(2) Promote arts-based experiential methods as appropriate and accessible ways of offering mindfulness to teachers and students

HAP was developed with the specific needs of vulnerable children and youth in mind and has been shown to increase self-awareness, mindfulness skills, and emotion regulation within this population. Teachers who participated in this study reported enjoying the arts-based methods utilized in HAP. They demonstrated increased knowledge of mindfulness and cultivated

mindfulness in their personal and professional lives. Since both adult and youth populations have demonstrated positive results and experienced benefits from their participation in HAP promoting and implementing this mindfulness-based program could yield similar overall positive results within education. Teachers who participated in HAP expressed appreciating the ease in which they could transfer the activities to the classroom. Arts-based methods can be engaging, fun, and practical for teachers and students, using supplies and material that are typically available in schools or otherwise affordable.

(3) Modify the program delivery and timing of HAP for teachers

Many participants felt the program and activities therein were valuable and they expressed that other teachers may also benefit from HAP. Recommendations by participants included offering HAP again and/or in a different format. MBSR and MBCT are offered in eight 2.5 hour weekly sessions, while HAP is traditionally delivered in 12, 2-hour weekly sessions. To accommodate the recommendations by the Rainbow District School Board's Ethics Research Board, the program sessions were reduced to 1.25 hours. Due to the structure of the school year, holidays, weather, and teachers' other responsibilities and commitments, the two HAP groups extended over 15 and 18 weeks in this study. Perhaps increasing the length of each session from 1.25 hours to 2.5 hours would decrease the duration of the study, without compromising the outcomes. Recommendations by participants to offer arts-based mindfulness training in full-day workshops led to the development and delivery of a three-day Mindfulness in Education course which incorporated many HAP activities. The recommendations from teachers in this study and positive feedback from the Mindfulness in Education course suggest future arts-based mindfulness courses would be well received by teachers. HAP sessions began in November and concluded at the end of February. Efforts to align program delivery with that of school semesters

or academic breaks could be considered in the future. Furthermore, a previous study suggested that offering HAP to pre-service teachers may be beneficial for the development of teacher presence (Grynspan & Coholic, 2016). This approach could further be explored through the development of an elective course and/or as training workshops for pre-service teachers. Additional qualification courses for teachers and/or professional development opportunities are other possible training opportunities to explore.

(4) Deliver HAP to students and teachers concurrently

Recommendations to deliver HAP to students and their teachers concurrently in parallel groups would offer students an opportunity to experience the benefits of participating in HAP such as increased emotion regulation, self-awareness, attention, focus, and coping, while increasing teachers' mindfulness and presence and thus, their capacity to respond to the emotional needs of their students. Offering HAP to teachers and students concurrently in a school setting may provide students with an opportunity to develop their mindfulness while improving their teachers' capacity to support their new learning. Teachers who participated in HAP demonstrated a keen interest in offering mindfulness activities experienced in HAP to their students and commented that they thought their students would benefit from the arts-based mindfulness program. Additional follow-up activities such as worksheets may bridge the learning offered in parallel sessions to teachers and students. Offering the program to both students and teachers may contribute to a more positive school climate and improve the learning environment.

Conclusion

This study contributes to previous research findings supporting the use of mindfulness-based interventions within education (Hahn & Weare, 2017; Jennings, 2015; Meiklejohn et al.,

2012). Mindful teachers have a better ability to manage classroom behaviours and establish positive relationships with students (Meiklejohn et al., 2012). HAP was found to increase teachers' knowledge of mindfulness, personal mindfulness practice, and their capacity of offer engaging and appropriate mindfulness activities to their students. These research results are supported by the previous findings describing the positive educational outcomes associated with teacher participation in mindfulness training. Findings from this study provide insight into the effectiveness of HAP as a suitable intervention for mitigating the negative effects of teacher stress. Teachers in this study reported feeling less stressed and better able to cope with stress in their personal and professional lives. Less stressed, more mindful teachers have an increased capacity to foster positive relationships with students through increased teacher presence (Hahn & Weare, 2017). Participants in this study indicated a keen interest in and increased capacity to offer mindfulness to their students.

The findings from this study led to the development and delivery of arts-based mindfulness workshops of varied lengths for teachers. Since the conclusion of the study, the delivery of HAP to students within RDSB schools also commenced in varied approaches. Future delivery of HAP to teachers and/or teachers and students concurrently is recommended. This study supports the usefulness of an arts-based mindfulness program for decreasing teachers' stress, increasing mindfulness, and improving teacher presence. It expands the scope of knowledge regarding the effects of this emerging MBI and contributes to the existing literature concerning mindfulness in education.

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Appendices

Appendix A – Recruitment Poster

Arts-Based Mindfulness Group for Teachers

beginning September 2017

Stress

Teachers experience high levels of stress leading to overwhelmed, burnt out teachers. We need effective tools to manage our stress and to support our students in developing tools to do the same.

Mindfulness

Mindfulness practice is about improving your ability to pay attention to what is happening right now, and through that process, seeing things without judging them. Mindfulness-Based Interventions (MBIs) have shown improvements in the overall well-being and stress management of teachers.

What is the Holistic Arts-Based Program (HAP)?

HAP is an arts-based program that is used to develop mindfulness skills and improve self-awareness and understanding of feelings. This 12-week program is being offered 1x week after school to teachers beginning in the Fall of 2017.

If you are interested in participating in this Research Study or would like more information contact
Amanda Hardy at ak_hardy@laurentian.ca

LaurentianUniversity
UniversitéLaurentienne

Appendix B – Follow-Up Letter/Email

Thank you for your interest in the Holistic Arts-Based Program.

Background: For the past 30 years, mindfulness-based interventions (MBIs) have shown to be promising interventions for a variety of challenges such as stress and anxiety. Mindfulness is the awareness that emerges by paying attention on purpose, in the present moment and non-judgmentally, to moment-by-moment experiences. Mindfulness is a holistic philosophy that encourages us to explore who we are, question our worldview, and foster appreciation for our experiences.

MBIs with young people can help them improve their abilities to pay attention, develop emotion regulation and self-understanding, and build self-compassion. When a child understands her feelings and thoughts, she can make better decisions regarding her emotional expression rather than acting out in response to a trigger. Schools are increasingly interested in incorporating mindfulness-based activities and curriculum into regular classroom teaching because of the benefits they see for their students.

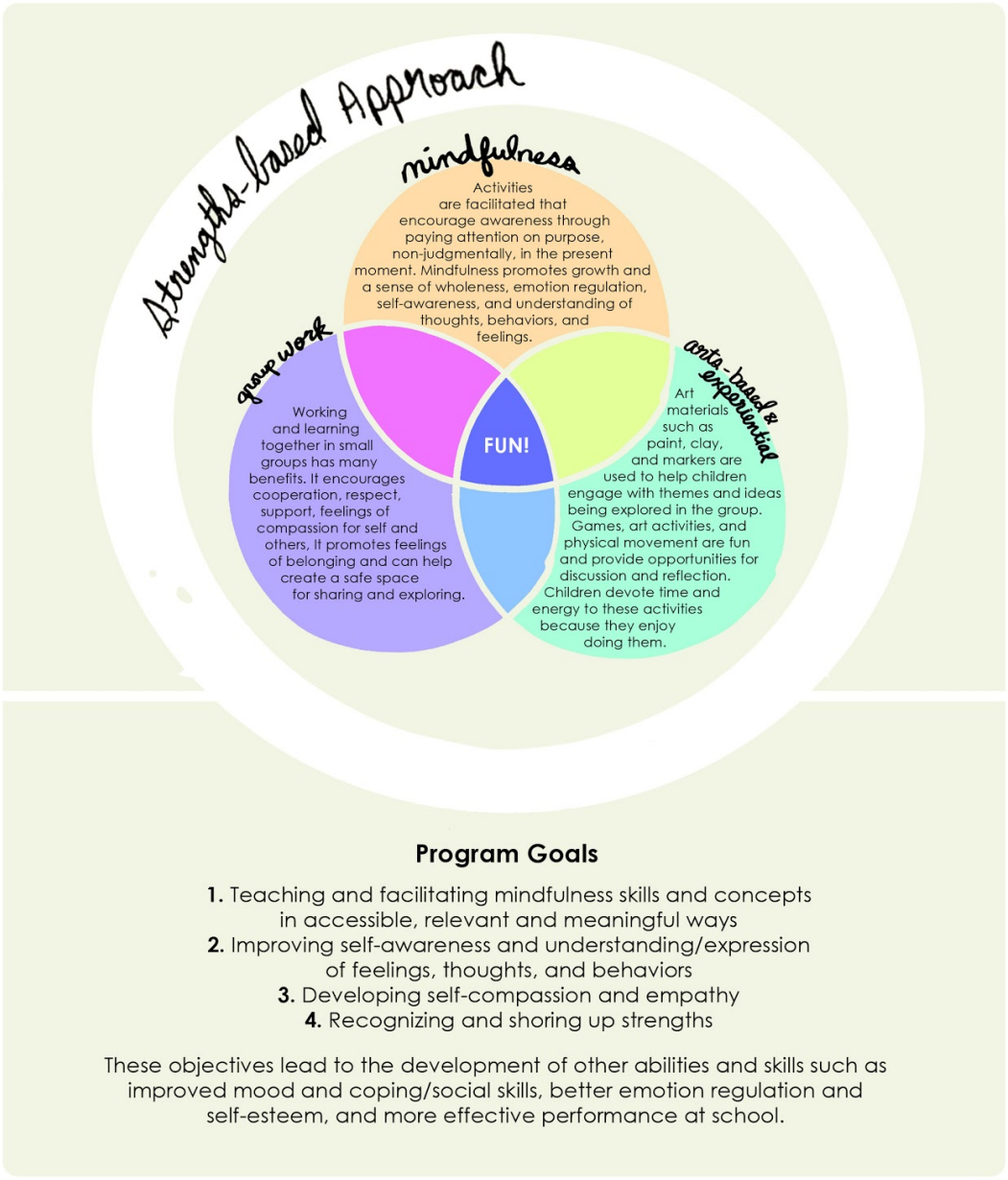
Holistic Arts-Based Program (HAP)
Dr. Diana Coholic (Laurentian University, School of Social Work) and her colleagues developed a 12-week mindfulness program called Holistic Arts-Based Program (HAP). HAP uses arts-based methods to teach mindfulness concepts and skills in a small group setting. Many children and youth have participated in HAP; and HAP has recently been delivered to Laurentian University students. Both youth and adults who have participated in HAP report benefits in emotion regulation, mood, coping and social skills, confidence and self-esteem, empathy and ability to pay attention and focus. More information can be found at: www.dianacoholic.com

Potential Benefits for You
Your participation in HAP will involve fun arts-based group activities that are strengths-based, relevant and engaging. You will learn about mindfulness, gain proficiencies in managing your own stress, while engaging in activities that were developed specifically for use with children and youth.

We have room for up to 20 teachers to participate in two different groups. We will compose the groups on a first come first served basis. For more information and to secure a spot in this research project, please confirm your interest via email at ak_hardy@laurentian.ca

Appendix C - Conceptual Map

The HAP Map: A Conceptual Diagram



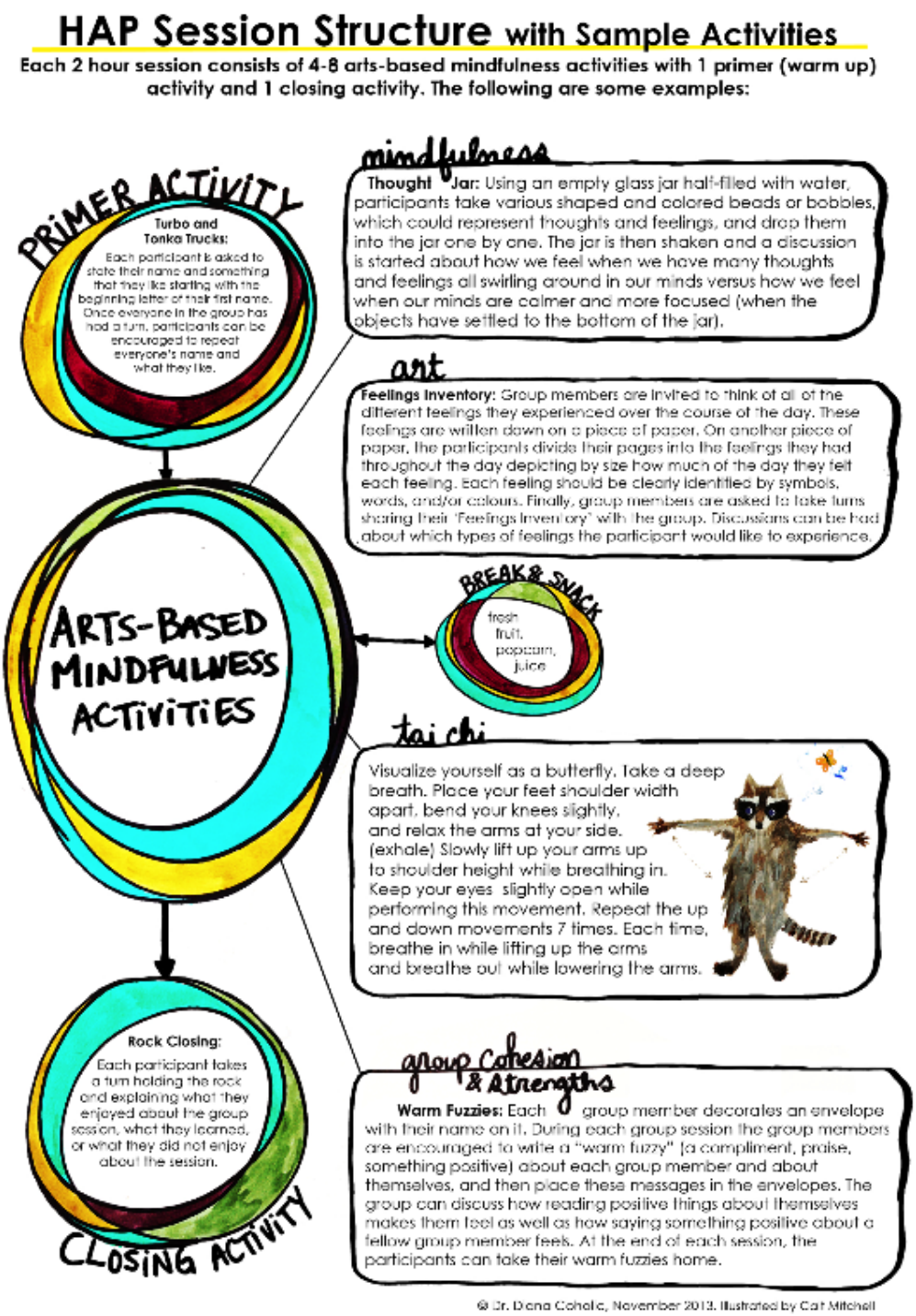
Program Goals

1. Teaching and facilitating mindfulness skills and concepts in accessible, relevant and meaningful ways
2. Improving self-awareness and understanding/expression of feelings, thoughts, and behaviors
3. Developing self-compassion and empathy
4. Recognizing and shoring up strengths

These objectives lead to the development of other abilities and skills such as improved mood and coping/social skills, better emotion regulation and self-esteem, and more effective performance at school.

(Coholic, 2017)

Appendix D – HAP Structure and Sample Activities



Appendix E – Teacher Consent Form

Teacher Consent Form

Study Title: Investigating the Benefits and Effectiveness of an Arts-Based Mindfulness Group Intervention for Decreasing Teachers' Stress

Student Researcher: Amanda Ley: ak_hardy@laurentian.ca
Supervisor: Dr. Diana Coholic: dcoholic@laurentian.ca

We are interested to know how helpful our arts-based mindfulness group program is for teachers. HAP (Holistic Arts-Based Program) is a strengths-based program to develop mindfulness skills and resilience. The goals of HAP include learning mindfulness, improving self-awareness, developing self-compassion and empathy, and managing stress. If you agree to take part in this program, you will:

a. Attend the arts-based group program once a week for 12 weeks where every week you will take part in 1 hour 15-minute group sessions.
b. Before the program begins we ask that you participate in a 1-hour focus group interview to help us determine how mindful you are, how you are managing your stress, and what you hope to gain from participation in the program.
c. After the program we ask that you participate in 1-hour focus group interviews where you can tell us how mindful you are, what things you liked and/or didn't like about the program, and what you learned that will help you in your personal and professional life going forward.
d. Complete self-report inventories the focus group meetings that will tell us how mindful and stressed you feel. These 2 inventories will take you approximately 15 minutes to complete.

We hope that taking part in this program will help you to learn how to become more mindful and increase self-awareness and decrease the stress you feel, as well as develop some tools to use in your own teaching practices with your students.

Group participation with peers around thoughts and feelings may elicit challenging emotions or uncomfortable feelings. This being said, the HAP program is designed as a strengths-based group, building on competencies while improving coping skills – it is not a "therapy" group and you do not have to talk about difficult matters if you don't want to do so. The program was initially created about 10 years ago for vulnerable children and youth in care and has been successfully facilitated to approximately 200 participants. The program maintains sensitivity and safety with the goal of engaging participants by making sessions creative, interactive and fun. If at any time during the program, you feel that you need to talk to someone outside the group, you could contact the following resources:

Crisis Intervention Services at Health Science North
127 Cedar St., Sudbury
705.675.4760 (24-hour hotline – 365 days/year)
Toll free: 1.877.841.1101

Office hours: 8:30 a.m. to 10:00 p.m. (no appointment necessary) 7 days per week

Ramsey Lake Health Centre
41 Ramsey Lake Road, Sudbury
705.675. 4760
If immediate medical care is needed, there is a Crisis Nurse available in the Emergency Department of Health Science North 24 hours per day. Register with the triage nurse in the Emergency Department to see the Crisis Nurse.

Mobile Crisis Team, City of Greater Sudbury
Our Mobile Crisis Team can visit you in the community at a safe location (City of Greater Sudbury). Call us to arrange an outreach visit
705.675.4760 (24-hour hotline – 365 days/year)
Toll free: 1.877.841.1101
Office hours: 10:00 a.m. to 10:00 p.m. 7 days per week
(Last dispatch @ 8:30 p.m.)

Rainbow District School Board - Employee Assistance Program
877.207.8833

Elementary Teachers' Federation of Ontario – Rainbow Local
Feeling Better Now
705.522.8320
800.908.0066

We will audio-record the focus group discussions so that we can learn about your experience and how to improve our program. These meetings will be transcribed (typed out word for word) by Amanda.

We want you to know that taking part in the group is your decision and no one is forcing you to be involved. Whether or not you participate will in no way affect your job status. We only want teachers in the program who really want to be involved. If you decide to be part of the program, and then later change your mind, then you can stop coming at any time with no consequences, but we will keep the data we already collected.

All of the information we collect will remain confidential (that means that only some people like Amanda, and her supervisor, Dr. Coholic can see and listen to it) – everything will be locked up at the University. You should know that while we encourage participants to keep what happens in the group confidential, we can't guarantee confidentiality if other participants choose to speak outside the context of the research. We will discuss confidentiality in the first group meeting. Five years after the research is completed, all of the information that we collect will be destroyed. We will want other people to know about our work with you but we will never give anyone information so that they would know who you are. For example, we might use a picture of one of your arts-based creations to demonstrate what we do in the group. We would like you to take your arts-based creations home with you, but we would like to photograph some of them for our records.
Agree to photographs of arts-based creations_____

Initial

If you have any questions at any time, you can email Amanda at ak_hardy@laurentian.ca. If you have any questions about the ethics of this research, you can contact **Dr. Diana Coholic, School of Social Work, 705.675.1151 ext. 5053 or the Research Ethics Officer,** at **Laurentian University Research Office, phone: 705-675-1151 ext. 3213 or 2436 or toll free at 1-800-461-4030; email ethics@laurentian.ca.**

By signing this form, you agree to take part in our program and you're letting us know that you understand everything on this form. You will receive a copy of this form that you can keep.

_____

Participant's Signature(s): Date

Appendix F - Group Interview Questions

Before HAP:

1. Have you ever heard of mindfulness, and if so, what do you think it is?
2. How do you think it could help you?
3. What are some of the daily life challenges/stressors at home and/or at work?
4. What are some strategies that you use to cope with these challenges?
5. How do you cope with these challenges?
6. Why did choose to participate in HAP? How do you hope to benefit from it?
7. *Do you anticipate having any challenges of participating in the program? If so, what are they?*

After HAP:

1. Did participating in HAP help you, and if so, how? What did you find challenging about participating in HAP?
2. How would you describe HAP? How would you describe mindfulness?
3. How could we improve HAP?
4. What were some of your favourite activities?
5. What did you learn in HAP that you could apply in your teaching/work with students?
6. Do you think HAP was helpful for your stress and/or mental health? If so, how?
7. Do you think HAP would be beneficial to your students?
8. Would you recommend this program for other teachers?

Appendix G – Five Facet Mindfulness Questionnaire

Five Facet Mindfulness Questionnaire

Description:
This instrument is based on a factor analytic study of five independently developed mindfulness questionnaires. The analysis yielded five factors that appear to represent elements of mindfulness as it is currently conceptualized. The five facets are observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience.

Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

1	2	3	4	5
never or very rarely true	rarely true	sometimes true	often true	very often or always true

___ 1. When I'm walking, I deliberately notice the sensations of my body moving.
___ 2. I'm good at finding words to describe my feelings.
___ 3. I criticize myself for having irrational or inappropriate emotions.
___ 4. I perceive my feelings and emotions without having to react to them.
___ 5. When I do things, my mind wanders off and I'm easily distracted.
___ 6. When I take a shower or bath, I stay alert to the sensations of water on my body.
___ 7. I can easily put my beliefs, opinions, and expectations into words.
___ 8. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.
___ 9. I watch my feelings without getting lost in them.
___ 10. I tell myself I shouldn't be feeling the way I'm feeling.
___ 11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.
___ 12. It's hard for me to find the words to describe what I'm thinking.
___ 13. I am easily distracted.
___ 14. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.
___ 15. I pay attention to sensations, such as the wind in my hair or sun on my face.
___ 16. I have trouble thinking of the right words to express how I feel about things
___ 17. I make judgments about whether my thoughts are good or bad.
___ 18. I find it difficult to stay focused on what's happening in the present.
___ 19. When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.
___ 20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
___ 21. In difficult situations, I can pause without immediately reacting.

___ 22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words.
___ 23. It seems I am "running on automatic" without much awareness of what I'm doing.
___ 24. When I have distressing thoughts or images, I feel calm soon after.
___ 25. I tell myself that I shouldn't be thinking the way I'm thinking.
___ 26. I notice the smells and aromas of things.
___ 27. Even when I'm feeling terribly upset, I can find a way to put it into words.
___ 28. I rush through activities without being really attentive to them.
___ 29. When I have distressing thoughts or images I am able just to notice them without reacting.
___ 30. I think some of my emotions are bad or inappropriate and I shouldn't feel them.
___ 31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.
___ 32. My natural tendency is to put my experiences into words.
___ 33. When I have distressing thoughts or images, I just notice them and let them go.
___ 34. I do jobs or tasks automatically without being aware of what I'm doing.
___ 35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.
___ 36. I pay attention to how my emotions affect my thoughts and behaviour.
___ 37. I can usually describe how I feel at the moment in considerable detail.
___ 38. I find myself doing things without paying attention.
___ 39. I disapprove of myself when I have irrational ideas.

Scoring Information:

Observe items:
1, 6, 11, 15, 20, 26, 31, 36

Describe items:
2, 7, 12R, 16R, 22R, 27, 32, 37

Act with Awareness items:
5R, 8R, 13R, 18R, 23R, 28R, 34R, 38R

Non-judge items:
3R, 10R, 14R, 17R, 25R, 30R, 35R, 39R

Non-react items:
4, 9, 19, 21, 24, 29, 33

Reference:

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. Assessment, 13, 27-45.

Appendix H – Teacher Stress Inventory

TEACHER CONCERNS INVENTORY

The following are a number of teacher concerns. Please identify those factors which cause you stress in your present position. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate how strong the feeling is when you experience it by circling the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, circle number 1 (no strength; not noticeable). The rating scale is shown at the top of each page.

Examples:

I feel insufficiently prepared for my job. 1 2 3 4 5

If you feel very strongly that you are insufficiently prepared for your job, you would circle number 5.

I feel that if I step back in either effort or commitment, I may be seen as less competent.
1 2 3 4 5

If you never feel this way, and the feeling does not have noticeable strength, you would circle number 1.

	1	2	3	4	5
HOW STRONG	no strength; not noticeable	mild strength; barely noticeable	medium strength; moderately noticeable	great strength; very noticeable	major strength; extremely noticeable

---

TIME MANAGEMENT

1. I easily over-commit myself.	1	2	3	4	5
2. I become impatient if others do things to slowly.	1	2	3	4	5
3. I have to try doing more than one thing at a time.	1	2	3	4	5
4. I have little time to relax/enjoy the time of day.	1	2	3	4	5
5. I think about unrelated matters during conversations.	1	2	3	4	5
6. I feel uncomfortable wasting time.	1	2	3	4	5
7. There isn't enough time to get things done.	1	2	3	4	5
8. I rush in my speech.	1	2	3	4	5

Add items 1 through 8; divide by 8; place your score here:

WORK-RELATED STRESSORS

9. There is little time to prepare for my lessons/responsibilities.	1	2	3	4	5
10. There is too much work to do.	1	2	3	4	5
11. The pace of the school day is too fast.	1	2	3	4	5
12. My caseload/class is too big.	1	2	3	4	5
13. My personal priorities are being shortchanged					

due to time demands.	1	2	3	4	5
14. There is too much administrative paperwork in my job.	1	2	3	4	5

Add items 9 through 14; divide by 6; place your score here:

PROFESSIONAL DISTRESS

15. I lack promotion and/or advancement opportunities.	1	2	3	4	5
16. I am not progressing my job as rapidly as I would like.	1	2	3	4	5
17. I need more status and respect on my job.	1	2	3	4	5
18. I receive an inadequate salary for the work I do.	1	2	3	4	5
19. I lack recognition for the extra work and/or good teaching I do.	1	2	3	4	5

Add items 15 through 19; divide by 5; place your score here:

DISCIPLINE AND MOTIVATION

I feel frustrated...

20. ...because of discipline problems in my classroom.	1	2	3	4	5
21. ...having to monitor pupil behavior.	1	2	3	4	5
22. ...because some students would better if they tried.	1	2	3	4	5
23. ...attempting to teach students who are poorly motivated.	1	2	3	4	5
24. ...because of inadequate/poorly defined discipline problems.	1	2	3	4	5
25. ...when my authority is rejected by pupils/administration.	1	2	3	4	5

Add items 20 through 25; divide by 6; place your score here:

PROFESSIONAL INVESTMENT

26. My personal opinions are not sufficiently aired.	1	2	3	4	5
27. I lack control over decisions made about classroom/school matters.	1	2	3	4	5
28. I am not emotionally/intellectually stimulated on the job.	1	2	3	4	5
29. I lack opportunities for professional improvement.	1	2	3	4	5

Add items 26 through 29; divide by 4; place your score here:

EMOTIONAL MANIFESTATIONS

I respond to stress...

30. ...by feeling insecure.	1	2	3	4	5
31. ...by feeling vulnerable.	1	2	3	4	5
32. ...by feeling unable to cope.	1	2	3	4	5
33. ...by feeling depressed.	1	2	3	4	5
34. ...by feeling anxious.	1	2	3	4	5

Add items 30 through 34; divide by 5; place your score here:

FATIGUE MANIFESTATIONS

I respond to stress...

35. ...by sleeping more than usual.	1	2	3	4	5
36. ...by procrastinating.	1	2	3	4	5
37. ...by becoming fatigued in a very short time.	1	2	3	4	5
38. ...with physical exhaustion.	1	2	3	4	5
39. ...with physical weakness.	1	2	3	4	5

Add items 35 through 39; divide by 5; place your score here:

CARDIOVASCULAR MANIFESTATIONS

I respond to stress...

40. ...with feelings of increased blood pressure.	1	2	3	4	5
41. ...with feeling of heart pounding or racing.	1	2	3	4	5
42. ...with rapid and/or shallow breath.	1	2	3	4	5

Add items 40 through 42; divide by 3; place your score here:

GASTRONOMICAL MANIFESTATIONS

I respond to stress...

43. ...with stomach pain of extended duration.	1	2	3	4	5
44. ...with stomach cramps.	1	2	3	4	5
45. ...with stomach acid.	1	2	3	4	5

Add items 43 through 45; divide by 3; place your score here:

BEHAVIORAL MANIFESTATIONS

I respond to stress...

46. ...by using over-the-counter drugs.	1	2	3	4	5
47. ...by using prescription drugs.	1	2	3	4	5
48. ...by using alcohol.	1	2	3	4	5
49. ...by calling in sick.	1	2	3	4	5

Add items 46 through 49; divide by 4; place your score here:

TOTAL SCORE

Add all calculated scores; enter the value here _____.

Then, divide by 10; enter the Total Score here _____.

Demographic Variables

Your gender:

Years of experience: _____

Your age: _____

What grade(s) do you teach? _____

How many students do you teach each day? _____

With what type of students do you work?

Nonhandicapped Handicapped

Which is the most advanced degree you have?

Bachelors Masters Doctorate

Do you and your peers support one another when needed? Yes No

Do you and your supervisors support one another when needed? Yes No

Appendix I – Phases of Thematic Analysis

Table 1: Phases of Thematic Analysis

Phase	Description of the process
1. Familiarising yourself with your data	Transcribing data (if necessary), reading and re-reading the data, nothing down initial ideas
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code
3. Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme
4. Reviewing themes	Checking in the themes work in relation to the coded extracts (level 1) and the entire data set (level 2), generating a thematic 'map' of the analysis
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme
6. Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

(Braun & Clarke, 2006, p. 87)

Appendix J – Thoughts Jar Activity

Appendix K – Laurentian University Research Ethics Board's Approval

APPROVAL FOR CONDUCTING RESEARCH INVOLVING HUMAN SUBJECTS
Research Ethics Board – Laurentian University

This letter confirms that the research project identified below has successfully passed the ethics review by the Laurentian University Research Ethics Board (REB). Your ethics approval date, other milestone dates, and any special conditions for your project are indicated below.

TYPE OF APPROVAL / New X / Modifications to project / Time extension	
Name of Principal Investigator and school/department	Amanda Hardy, supervisor, Diana Coholic, Social Work
Title of Project	Investigating the Benefits and Effectiveness of an Arts-Based Mindfulness Group Intervention Program for Decreasing Teachers' Stress
REB file number	6011020
Date of original approval of project	Oct. 17th, 2017
Date of approval of project modifications or extension *(if applicable)*	
Final/Interim report due on: *(You may request an extension)*	October 17th, 2018
Conditions placed on project	

During the course of your research, no deviations from, or changes to, the protocol, recruitment or consent forms may be initiated without prior written approval from the REB. If you wish to modify your research project, please refer to the Research Ethics website to complete the appropriate REB form.

All projects must submit a report to REB at least once per year. If involvement with human participants continues for longer than one year (e.g. you have not completed the objectives of the study and have not yet terminated contact with the participants, except for feedback of final results to participants), you must request an extension using the appropriate LU REB form. In all cases, please ensure that your research complies with Tri-Council Policy Statement (TCPS). Also please quote your REB file number on all future correspondence with the REB office.

Congratulations and best wishes in conducting your research.

Rosanna Langer, PHD, Chair, *Laurentian University Research Ethics Board*

Appendix L – RDSB Education Research Council Approval

Rainbow District School Board
Centre for Education
408 Wembley Drive, Sudbury, Ontario P3E 1P2 | Tel: 705.674.3171 | Toll Free: 1.888.421.2661 | rainbowschools.ca

June 22, 2018

Amanda Ley
1761 Coldstream Place
Sudbury, ON P3A 5S8

Dear Amanda Ley:

The purpose of this letter is to inform you that your Research Project Proposal entitled ***"Investigating the Suitability, Benefits, and Effectiveness of an Arts-Based Mindfulness Group Intervention for Increasing Mindfulness Skills and Self-Awareness of Teachers"*** has been approved.

Rainbow District School Board permits you to contact the school(s) in order to present your proposal. The principal has the final authority to allow research in his/her school.

All on-site data collectors/facilitators need a current criminal record check on file with my office prior to entry to any school.

The Education Research Council would appreciate receiving a copy of your completed research project so that we might ascertain its impact in our school system.

Sincerely,

B Bourget

Bruce Bourget
Superintendent of Schools
Rainbow District School Board
bourgeb@rainbowschools.ca

Encl. (1)

Appendix M – Painting on a Line Activity

PAINTING ON A LINE

PURPOSE

Painting on a line teaches not to focus on the final product but instead the process of doing something creative and having fun.

HOW TO

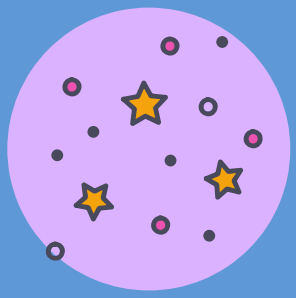
1. A line of string is hung in the room.

2. One piece of paper for each group member is hung from the line with clothespins.

3. The participants are encouraged to paint something without holding the paper with their hands.

LEARNING

Connections can be made about adapting your expectations in a challenging situation and the importance of being in the present moment.



THE EXPERIENCE

"Painting on a line lets me have fun making a mess"

"Painting on a line teaches me to be in the moment"

"Holistic Arts-Based Program (HAP)" www.dianacoholic.com

Appendix N – Me as a Tree Activity

ME AS A TREE

PURPOSE

Me as a tree helps people symbolize themselves as a tree. This is a good "get to know you" activity.

HOW TO

1. Participants are asked to draw themselves as a tree.

2. Participants are encouraged to share their tree and how it represents who they are.

LEARNING

Everyone can draw a tree, but everyone's trees will always be different and unique. This helps to understand how diversity is important.

THE EXPERIENCE

"Me as a tree shows people that it's okay to be different"

"Me as a tree lets me have fun with who I am"

"Holistic Arts-Based Program (HAP)" www.dianacoholic.com